

ABSTRACT

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A STUDY OF ILLICIT DRUG USE, FAMILY RELATIONSHIPS, AND
EMPLOYMENT OF PATIENTS OF FAITH-BASED AND CONTINGENCY
MANAGEMENT SUBSTANCE ABUSE TREATMENT PROGRAMS

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This study compares illicit drug use, family relationships, and employment among substance abusers participating in treatment at The Atlanta Union Mission, a faith-based treatment program and Alliance Recovery Center, a contingency management treatment program. One hundred forty-nine (149) survey participants were selected for the study, utilizing non-probability convenience sampling. The survey participants were composed of both men and women in treatment for at least three months. The survey questionnaire was comprised of seventeen questions and a four point Likert scale. The findings of the study indicated a significant difference in the continuous use of illicit drug use for contingency management treatment and faith-based treatment programs. The process of most contingency management programs is to support participants in sustaining from one illicit drug at a time and 38% of the respondents indicated that they used multiple substances. This could account for the 15.6% responses at the contingency management treatment program who indicated an occasional use of illicit drugs. In the

areas of family relationship and employment, both programs outcomes indicated a positive effect on program participants.

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MANAGEMENT SUBSTANCE ABUSE TREATMENT PROGRAMS

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BY

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Heart felt love and appreciation go out to my two children Michael and Tameeka Tophia, who were like beacons of light and brought meaning to my perseverance. To those encouraging forces that never let me forget my true identity, even after their departure, my father, Nathaniel Rowland, Sr., my grandfather, James Rowland, Sr. and my brother, Dr. Nathaniel Rowland, Jr. Memories of them will always be with me. They encouraged me to follow my heart and believe in myself, while instilling in me the determination to have the courage and wisdom to be my own person. I acknowledge Dr. Allen Carter, my coach and my motivator, who kept me focused on my goals. His insight is beyond reproach. During times when I felt like giving in, he brought that bit of knowledge that motivated me to keep going. I respectfully acknowledge all my friends, co-workers and peers in the field of substance abuse, who unwaveringly supported me to the end. I acknowledge several immediate family members, Judi Arnold, Sarah Rowland, Dr. Christopher Rowland and most especially my mother, Carrie Rowland, who constantly expressed how proud they were of my accomplishments. I am so grateful for having had the opportunity to experience such an awesome journey. I will be forever thankful for those individuals who strengthened my life along the way. I embrace my experiences, knowledge and skills, as I continue on this journey called Life.

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CHAPTER I

INTRODUCTION

Substance abuse generates dramatic costs to all societies in terms of lost productivity, transmission of infectious diseases, family and social disorder, crime and excessive utilization of health care. Drug related problems not only reduce the safety and quality of daily life, they are also a source of substantial expense. Regardless of whether substance abuse is a sin, a crime, a bad habit or an illness, society has a right to expect that an effective approach to the “drug abuse problem” will reduce drug related crime, unemployment, family dysfunction and disproportionate use of medical care (United Nations, 2003).

Since the evolution of the 1960’s, the United States has been faced with the ever-increasing use of illegal drugs in society. This also corresponds with the increase of legal pharmaceutical drugs. The United States uses the latest military technology to protect its borders and illicit drug use still increases. There are drug awareness programs in schools, on nationally televised programs and in substance abuse treatment centers throughout many communities; yet people continue to be incarcerated for illicit drug use. There is a large group of people that hope substance abuse will become somebody else’s problem or simply go away; yet when they open their eyes, they see millions of people who are affected – families are broken and lives are destroyed (Williams, 2004).

A wide range of substances are abused; however, the most common classes include opioids, benzodiazepines, sedatives, stimulants, cannabinoid, depressants, dissociative anesthetics, hallucinogenic, steroids, inhalants, and alcoholic drinks. Substances of abuse that are actually prescription medication may have been obtained on the street illegally or may have been a legal, medically indicated prescription that a person begins to use without regard to the direction of his/her physician (Black, 2004).

Substance abuse involves compulsive seeking to use an addictive substance, regardless of the potentially negative social, psychological, and physical consequences. According to the National Drug Control Policy, an estimated 19.5 million Americans use illicit drugs and as many as 19,000 people die of drug-related causes each year (Drug and Substance Abuse, 2004).

Substance abuse can have serious short-and long-term medical effects. It can dangerously increase heart rate and blood pressure, and cause hepatitis or Acquired Immune Deficiency Syndrome (AIDS) through shared needles. Substance abuse may also cause violent, erratic, or paranoid behavior and hallucinations, clinical depression, liver, lung, and kidney impairment and even sudden death (Drug and Substance Abuse, 2004).

Substance abusers are twice as likely to visit an emergency room and nearly seven times more likely to be hospitalized than comparably aged persons who do not use illicit drugs. Even in Canada where people have access to universal health insurance, substance abuse accounts for approximately eight percent of hospitalizations. In the United States, taxpayers are responsible for much of the hospitalization costs for substance abusers.

Once hospitalized, they also appear to have longer lengths of stay. Substance abusers and the public can benefit from the identification of factors that prevent drug users' heavy reliance on inpatient care (Laine, Hauck, Gourevitch, Rothman, et al., 2001).

The adverse impacts on health is affected by the circumstances and behaviors associated with substance abuse. Common accompaniments of drug abuse such as, inadequate housing and poor nutrition, can increase exposure to diseases and reduce ability to fight off infections. Blood clots, severe skin infections and blood-borne infections, including life-threatening endocarditis, viral hepatitis and human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS) are all promoted by injecting drugs. Impulsive sexual activity that elevates individuals' risks for acquiring and transmitting HIV/AIDS and other sexually transmitted diseases are also associated with the abuse of some drugs (Leshner, 2000).

Substance abuse also affects our national budget. The annual costs of substance abuse have been estimated at \$66.9 billion. It has also been found that at least twenty percent (\$2 billion of Medicaid inpatient hospital cost - \$40 billion) are used to treat substance abuse disorders (Blumenthal, 1998).

The fact that the cost of treatment is so expensive also impacts the quality of service. Those with the means to do so, have the option of entering private-for-profit treatment facilities, and generally receive better care (Coletti, 1998).

Drug use ranks among the worst of risky behaviors. The likelihood that an adult who uses on at least a monthly basis will go on to need drug treatment is approximately one in four. This is high enough to constitute a considerable risk but low enough that

many individuals are able to deny the obvious risks or convince themselves that they can manage their drug using behavior (Office of National Drug Control Policy, 2005).

Calculating the cost of drug abuse and the benefit of treatment can be extremely complicated. Many areas are impacted by substance abuse beyond merely the individual user. Drug use adversely affects the individual user as well as the family, the local community, the broader community, and society at large. Effective treatment can generate both savings in cost and a broad array of other benefits at each of these levels (Strain & Stoller, 1999).

Statement of the Problem

The two major reform efforts that have affected the substance abuse treatment field are health care reform and welfare reform. Both of these reforms highlight the task of employment readiness service in substance abuse treatment. Treatment providers must attempt to match a patient's individual needs to an appropriate level of care under the cost-saving initiatives of health care reform and move substance-abusing clients off welfare and into work under the welfare reform (U. S. Department of Health and Human Services, 2000).

According to the American Management Association (AMA), between 4 percent and 5 percent of applicants test positive for illicit drugs. A survey conducted by the United States Postal Service (USPS) showed a direct tie of substance abuse to the cost of doing business. USPS projected it would have saved approximately \$52 million by 1989

if it had not hired drug users in 1987. By 1991, the estimated savings would have increased to \$105 million (Current, 2002).

Substance abuse often leads to significant personal and social consequences. Medical studies clearly demonstrate that illicit drug use lowers physical and emotional capabilities (French, Zaskin & Dunlap, 1998).

Individuals who suffer from substance abuse face major obstacles to succeeding in life and in the workplace. Substance abuse can impede the abusers' ability to learn and to work. Entering or re-entering the workplace brings numerous personal challenges and stressors that can trigger relapse. Treatment may be necessary to enable these individuals to benefit from job readiness activities, but may not be sufficient to ensure job retention. Maintaining recovery requires a sustained personal commitment and supportive social environment (U. S. Department of Labor Employment and Training Administration, 2004).

Substance abuse treatment providers must re-evaluate their responsibilities and focus on socially important goals. Providers must work with employers and social welfare agencies towards the goals of returning to or finding work. They must work with criminal justice agencies and parole/probation officers towards keeping the patient from returning to drug-related crime and incarceration. Finally, providers must work with family agencies and families towards the goals of returning to, or taking on, responsible family roles, especially parenting. These are the substance abuse related issues that effect society most. Reduction or elimination of them is what society expects from any "effective" intervention (United Nations, 2003).

Substance abuse treatment that is cost-effective and shows positive outcomes is the ultimate goal. However, to achieve the goal all the patient's service needs must be met. Services provided to patients must focus on pathways into careers, job satisfaction, overcoming a variety of barriers to employment, establishing positive social relationships, and the needed skills for maintaining employment (U.S. Department of Health and Human Services, 2000).

Purpose of Study

The purpose of this study was to analyze faith-based substance abuse treatment and contingency substance abuse treatment. The study also compares faith-based substance abuse treatment with contingency management substance abuse treatment. Each treatment approach outcome was analyzed in regards to participants' illicit drug use, relationships with family members and employment status. These are considered to be important to the improved quality of life and long-term sobriety of substance abusers.

The research provided comprehensive information regarding the history, funding and outcome studies in the United States. Information was gathered from substance abusers at a faith-based treatment program and an opioid treatment program, using the contingency management approach. Participants' illicit drug use was measured in terms of the initial drug use assessment and three months follow-up to determine decreased or ceased use of illicit drugs and the extent to which treatment programs helped them to stop illicit drug use. Family relationships were measured in terms of family education and therapy provided at treatment programs and support received from family members.

Employment status was measured in terms of unemployed, full-time and part-time employment, annual income and the extent to which treatment program helped to maintain employment.

Research Questions

1. Is there a difference in the outcome of faith-based substance abuse treatment participants' continuous illicit drug use and contingency management substance abuse treatment participants' continuous illicit drug use?
2. Is there a difference in the outcome of faith-based substance abuse treatment participants' family relationships and contingency management substance abuse treatment participants' family relationships?
3. Is there a difference in the outcome of faith-based substance abuse treatment participants' employment status and contingency management substance abuse treatment participants' employment status?

Null Hypotheses

There is no statistically significant difference between the outcome of faith-based substance abuse treatment participants' continuous illicit drug use and contingency management substance abuse treatment participants' continuous illicit drug use.

1. There is no statistically significant difference between the outcome of faith-based substance abuse treatment participants' family relationships and the outcome of contingency management substance abuse treatment participants' family relationships.

2. There is no statistically significant difference in the outcome of faith-based substance abuse treatment participants' employment status and contingency management substance abuse treatment participants' employment status.

Significance of Study

Substance abuse treatment researchers have shown interest in the manner in which an individual's characteristics are related to treatment outcome. They have also examined the possibility that certain approaches to treatment may be more suited for some patients than others and how their characteristics may provide a basis for matching them with the most effective treatments (Block, 2004).

There have been some clear findings about substance abuse treatment practices (e.g., longer treatment duration) that are correlated with positive post-treatment outcomes. But the question most frequently and persistently asked of substance abuse treatment researchers is: Does treatment work? A growing number of substance abuse treatment researchers are calling for more exploration of policy and program factors that contribute to the effective delivery of substance abuse treatment services and improved treatment outcomes (Heinrich, 2002).

The perplexing issue is that many substance abuse professionals believe that a faith-based approach serves as a powerful aid to recovery, whereas others believe that recovery is basically a matter of altering the behavior of the abuser. Still others believe that although spiritual growth and behavior change are appropriate during the recovery

process, the treatment approach must also include altering the individuals' thinking and emotion process.

This study purports to shed some light on the effectiveness of two substance abuse treatment approaches in the areas of continuous illicit drug use, family relationships and employment. Social workers, as well as other professionals, who work with the substance abuse population, could benefit from research that demonstrates the effectiveness of faith-based and contingency management treatment approaches, in the areas of continuous illicit drug use, family relationships and employment. A significant aspect of this study is its contribution to the literature and the future empirical base of knowledge that can be used to improve substance abuse treatment and effective treatment referral. The lack of adequate data analyzing and comparing faith-based and contingency management substance abuse treatments underscores the need for more improved data and information in this area.

Moreover, this study may also enhance the social work and counseling professions knowledge base regarding the need to identify appropriate treatment modalities for the substance abuse population they serve. Additionally, the study may suggest the need for schools of social work administrators to develop curricula regarding various approaches to substance abuse treatment.

Definition of Terms

1. **Abstinent** - Refraining from using illicit or non-prescribed licit drugs.

2. Alcohol Abuse – A maladaptive pattern of alcohol use leading to clinically significant impairment or distress.
3. Amphetamines – A group of powerful and highly addictive substances that dramatically affect the central nervous system.
4. Barbiturates – A sedative drug.
5. Behavior – The way a person acts or conducts him/herself.
6. Cocaine – The most potent stimulant of natural origin, a bitter addictive anesthetic (pain blocker) that is extracted from the leaves of the coca scrub.
7. Contingency – Dependent on something that may or may not occur or liable but not certain to happen.
8. Coping Skills – The abilities used to overcome struggles, problems or difficulties.
9. Detoxification – The process of removing or transforming.
10. Emotions – Intense feelings, such as love, hate or despair.
11. Employment – The act of working for another.
12. Faith – The complete trust and belief in God.
13. Family – A person's parents, spouse, siblings, extended family, guardians, legally authorized representatives, or significant others as identified by the person served.
14. Hallucinogens – A chemically diverse group of drugs that cause changes in a person's thought process, perceptions of the physical world, and a sense of time passing.
15. Heroin – A drug processed from morphine, a naturally occurring substance extracted from the seedpod of the Asian poppy plant.

16. **Higher Power** – An internal, individual concept of a Spirit that is accessible, broad and all-inclusive.
17. **Illicit** - An activity not permitted.
18. **Inhalant** – Breathable chemical vapors that can produce psychoactive (mind-altering) effects.
19. **Inpatient** – A patient who receives lodging and food, as well as treatment.
20. **Interpersonal** – Being related to or involving relations between persons.
21. **Intervention** – A method used to come between a person and his/her behavior in order to stop, settle or modify the behavior.
22. **Licit Drugs** – A lawful activity.
23. **Long-Term** - Extending over or involving a lengthy period of time.
24. **Marijuana** – This is the most commonly used illicit drug in the United States. A dry, shredding green/brown mix of flowers, stems, seeds and leaves of the hemp plant.
25. **Medical** – Relating to the science of practice of medicine or the treatment of disease.
26. **Methadone** – a synthetic opiate use to treat heroin addiction.
27. **Methamphetamines** - This is an addictive stimulant drug that strongly activates certain systems in the brain.
28. **Moral** - Relating to principles of right and wrong.
29. **Narcotics** – Addictive drugs that reduce the user's perception of pain and induce euphoria (a feeling of exaggerated and unrealistic well-being).

30. **Opioid** – A class of addictive illegal and legal drugs that include heroin and a variety of pain medications, such as, Demerol, percocet, hydrocodon and oxycoten.
31. **Outcome** – Result of end point of care or status achieved by a defined point following delivery of services.
32. **Outpatient** – A patient who visits a hospital or clinic for diagnosis or treatment without staying overnight.
33. **Prayer** – A style of communication with a deity or Creator and has been characterized as a form of complementary or alternative therapy.
34. **Recovery** – A full return to bio/psycho/social functioning.
35. **Relapse** – The process of becoming dysfunctional in recovery, which leads to a return to substance abuse, physical or emotional collapse, or suicide.
36. **Relationship** – The state of being connected or unified with another person.
37. **Religion** – A belief in a divine or superhuman power or powers to be obeyed and worshipped as the creator(s) and ruler(s) of the universe. There is an expression of this belief in conduct and ritual.
38. **Residential** – When a person occupies or is restricted to the actual building or structure in which he/she lives.
39. **Sedative** – Compounds that cause physiological and mental slowing of the body.
40. **Short-term** - Occurring over or involving a relatively brief period of time.

41. **Spirituality** – A relationship with the divine, as well as with other people, and that this experience calls one to be in transformation, which allows them to become their true selves.
42. **Substance Abuse** – The misuse of mood-altering, legal or illegal drugs that lead to negative affects on relationships, school or work performance, personal finances, or cause other negative behaviors.
43. **Therapeutic** - Relating to or dealing with healing and especially with remedies for diseases, mental health or substance disorders.
44. **Tranquilizers** – Depressants that are highly addictive- a common brand name for barbiturates.
45. **Transform** – To change in structure, appearance or character.
46. **Treatment** – A substance or method used in treating.
47. **Triggers** – An event that occurs before a person uses illicit drugs and increases the likelihood of use.

CHAPTER II

REVIEW OF LITERATURE

This literature review focuses on conceptual articles and empirical findings that address and explain substance abuse treatment and some traditional treatment approaches. This literature review discusses a historical perspective of substance abuse that includes funding of substance abuse treatment, illicit drug use and treatment, family relationships and substance abuse and employment and substance abuse. The literature review also discusses an overview of substance abuse treatment and the two substance abuse treatment approaches that are identified for this study: Faith-Based Substance Abuse Treatment and Contingency Management Treatment. Finally, the literature examines the two theoretical frameworks utilized for this study: Existential Perspective and Behaviorist Perspective.

Historical Perspective of Substance Abuse

The first legal measures against drug abuse in the United States were established in 1875, when opium dens were outlawed in San Francisco. The initial national drug law was the Pure Food and Drug Act in 1906. This law required accurate labeling of patient medicines containing opium and certain other drugs (Drug Addiction, 2005).

Historically, the use of illicit and licit drugs was seen as a way of life as opposed to a social problem. However, with the rise of immigration, and the fact that it was mostly African Americans and Asian Americans who were using drugs, rather than the upper class white women, the government sought to restrict and control the use of substances with the Harrison Act of 1914. This Act attempted to eliminate illicit narcotics, as well as monitor all drug flow in the medical industry (Kendall, 1998).

The law specifically stated that manufacturers, importers, pharmacists and physicians prescribing narcotics should be licensed to do so, at a moderate fee. Registered physicians were also required to keep records of drugs dispensed or prescribed in the course of their practice only. This clause was interpreted by law enforcement officers to mean that a doctor could not prescribe opiates to an abuser to maintain his drug use because an abuser was not considered a patient and substance abuse was not a disease (Harrison Narcotics Tax Act, 1914).

The Harrison Act received numerous criticisms due to the increased abuse and sales of narcotics drugs after the enactment. The narcotics were causing people's health, behavior and status to deteriorate. In 1924 Congress responded by tightening up the Act. A law was enacted prohibiting the importation of heroin altogether, even for medicinal use (Harrison Narcotics Tax Act, 1914).

During Congressional hearings, witnesses rarely defended opiates or cocaine; however, those against including marijuana in federal legislation spoke more openly. January 1911 hearings were held on a federal antinarcotics law before the House Ways and Means Committee. The National Wholesale Druggists Association (NWDA)

representative, along with Albert Plaut of a New York pharmaceutical firm of Lehn and Fink, protested the inclusion of marijuana alongside opiates and cocaine. There were two contrasting attitudes towards marijuana. The reformers feared its use and the drug industry felt less concerned about possible misuse and opposed its regulation. However, both sides agreed that marijuana, although not as threatening as other drugs, should be included in regulatory laws for the purpose of anticipating its popularity once opiates and cocaine were brought under control (Musto, 1972).

In the 1920s, employers, in the United States, welcomed Mexicans but also feared them as a locus of crime and deviant social behavior. Many of the crimes in the mid 1920s were attributed to marijuana use and its Mexican purveyors. Legal and medical officers in New Orleans conducted several studies regarding crime and Mexicans. The result of the studies was that many of the region's crimes could be traced to marijuana. It was particularly implicated in the most severe crimes. Requests were soon made to include marijuana in the federal law that controlled similar substances, the Harrison Narcotic Act (Musto, 1972).

In 1929, PL 70-672 initiated federal responsibility for the treatment of narcotic abusers. The policy was implemented with the support of the U.S. Public Health Service Hospitals at Lexington, Kentucky and Fort Worth, Texas in 1935 and 1937 (National Institute on Drug Abuse, 2005).

Harry Anslinger of the Federal Bureau of Narcotics (FBN) managed to sway both public opinion and Congress to include marijuana in the 1932 Uniform State Narcotic Act and later passed the Marijuana Tax Act of 1937. This was accomplished despite the fact

that marijuana use had not aroused much national concern prior to 1930. Anslinger used the “women in danger” theme, indicating that if a woman is addicted and physically dependent, she becomes sterile and unable to have any children. This approach also proved useful in passing previous legislative against opiates and cocaine (Kendall, 1998).

Gleams of a change in philosophy were observed in 1955, when a Joint Committee of the American Bar Association and the American Medical Association met to reevaluate the issues of drugs in America. A final report issued in 1961 by the Committee made several suggestions, the most contentious of which was the creation of experimental outpatient clinics to treat substance abuse (Kendall, 1998).

After World War II, there was a notable increase in opiate use in the United States, especially in New York City, despite the efforts of the Treasury Department’s FBN. Government action culminated in the 1956 Narcotic Control Act, which mandated minimum sentencing for first conviction illicit drug charges to threat of the death penalty for some cases. Although Harry Anslinger, head of the FBN insisted that illicit drug use was under control, by the late 1950’s and early 1960’s it was clear that this was not the case (Strain and Stoller, 1999).

In January 1956 the Daniel Subcommittee submitted a document to the U.S. Congress on its findings on the illicit narcotic traffic in the United States. It was reported that the United States had more substance abusers than any other western nation, with a large percentage under twenty-one. Human lives were being shortened or destroyed at a startling rate with incalculable cost. Substance abuse was causing half the crimes committed in metropolitan areas, and a quarter of all reported in the entire nation. The

abuse was found to be contagious and the abusers were spreading the habit with cancerous rapidity (King, 1972).

The Subcommittee recommended that procedures be set up for substance abusers to only be admitted to drug programs for civil commitment requiring a mandatory period of treatment. The Subcommittee urged that federal facilities be made available to receive substance abusers committed under state laws provided state court ordered mandatory incarceration. Upon release, the abuser should be kept under supervised probation for at least three years – immediately returning to custody in the event of a relapse. After three arrests, the abuser would be considered habitual, causing confinement to an undermined quarantine-type of confinement at a suitable narcotic farm (King, 1972).

In the 1960s domestic barbiturate production was officially reported as 852,000 pounds. This was translated into an estimate of thirty-three capsules for every man, woman and child in the country. Americans had ingested 1.4 billion pounds of tranquilizers and were beginning to rival the barbiturates as suicide drugs. Unlike opiates and marijuana, these drugs were not confined to slum use but were affecting young people in high schools, on college campuses, and in wealthy suburban neighborhoods. Senator Thomas Dodd linked barbiturates and amphetamines as “hidden accomplices” with crimes of violence, accidents, and suicides, asserting that they contributed to bizarre sexual behavior among young people (King, 1972).

According to Kendall (1998), to control the black market trade on amphetamines, barbiturates, and other psychoactive drugs, the Drug Abuse Control Amendments of 1965 were added to the Federal Food, Drug and Cosmetic Act. The election of President

Kennedy, the Supreme Court decision of *Robinson v. California* [370 U.S. 660 (1962)], which stated that a substance related disorder was a disease and not a crime, and scientific developments in the understanding of substance abuse created conditions that were ripe for rethinking America's approach to substance abuse disorders.

In the mid 1960's, Drs. Vincent Dole and Marie Nyswander began providing opioid treatment at an inpatient unit at Rockefeller University with methadone. The results quickly gained the attention of the medical communities in the United States and other countries. This led to the institution and rapid expansion of opioid treatment worldwide. Programs were begun in Sweden in 1966; Holland in 1968; Australia in 1970; Hong Kong in 1972; Italy and Switzerland in 1975 and France in 1983 (Strain & Stoller, 1999).

The Special Action Office for Drug Abuse Prevention (SAODAP), within the Executive Office of the President, was created with the Drug Abuse Office and Treatment Act of 1972. This authorized the establishment of the National Institute on Drug Abuse (NIDA), within the National Institute of Mental Health (NIMH), to become operational in 1974. NIDA was responsible for developing a national community-based treatment system. Maintenance treatment of narcotic abusers was also permitted with this Act (National Institute of Drug Abuse, 2005).

The "War on Drugs" policies of the 1980's helped to generate an environment that denounced, criminalized and stigmatized persons who used and abuse alcohol and illegal substances. Significant increases in funding for research and a large body of literature on substance abuse, drug subcultures, and drug criminality grew out of this renewed sense of

the importance of cracking down on illegal drug use and users. The focus of most of that research and literature was primarily men, because men were the most "...socially visible participants within our drug culture" and women were assumed to be "...socially subordinate and passive participants" (Ettore, 1983).

Drug laws have tried to keep up with the changing perceptions and real dangers of substance abuse. Over 55 federal drug laws and countless state laws specified a variety of punitive measures, including life imprisonment and even the death penalty, by 1970. To clarify the situation, the Comprehensive Drug Abuse Prevention and Control Act of 1970 replaced all previous federal laws concerned with narcotics and all other dangerous drugs. The Act dealt with prevention and treatment of drug abuse and control of drug traffic. The Anti-Drug Abuse Act of 1986 and 1988 increased funding for treatment and rehabilitation. The 1988 Act created the Office of National Drug Control Policy (ONDCP) (Drug Addiction, 2005).

In 1985, crack cocaine use exploded in New York, Philadelphia, Washington and Miami. Since then, it has dominated illicit drug markets in many inner-city neighborhoods. It is also the most reported substance of abuse cited in the treatment based epidemiological indicator. From 1990 to 1993, approximately eighty percent of all substance abuse admissions to publicly funded substance abuse facilities were for crack cocaine, with most of the patients identified as African-American (Bencivengo and Cutler, 1993).

The "War on Drugs" failed to eliminate illegal drug use, despite huge amounts of economic resources, \$18.8 billion by the federal government in fiscal year 2002,

personnel, and massive prison construction. Illegal drug use was declining substantially in the 6 to 7 years before “War on Drugs” was declared by President Reagan and continued to downturn for the next 6 years with fluctuations occurring since the early 1990s (Jensen, Gerbert & Mosher, 2004).

As a nation, we moved from a liberal medical model of drug abuse in the nineteenth century, which viewed substance abuse as a disease to be treated, to a more conservative moral model in the early part of the twentieth century, which viewed substance abuse as an issue of personal shortcoming and failure. In the twenty-first century, we are moving back to the medical model. Regardless of the approach, the moral stigma attached to substance abuse still lingers (Blumenthal, 1998).

Funding Of Substance Abuse Programs

Federal grants to states and localities authorized under Title IV of the Narcotic Addict Rehabilitation Act helped to establish a community-based drug abuse treatment system in 1966. The system grew rapidly from 6 programs in June 1969 to more than 200 in 1974. The Drug Abuse Reporting Program (DARP) project was initiated to identify the characteristics of patients entering treatment and evaluate treatment outcomes in 1969. In the late 1960s and early 1970s, DARP obtained data on almost 44,000 patients in 52 programs. Outcome was reported for methadone maintenance, outpatient drug-free, residential drug free, and detoxification-only programs (Pickens, Leukefeld & Schuster, 1991).

In 1984, the federal government block grant legislation was amended to require every state to set aside five percent of its block grant allocation for new or expanded alcohol and drug abuse services for women. States were encouraged to spend these funds to develop women-only treatment programs. By 1988, due to public concern over drug-exposed infants and the national "War on Drugs," Congress doubled the women set-aside requirement. In the late 1980's and early 1990's Congress enacted legislation that funded demonstration grants for model programs for drug-using pregnant and postpartum women (Nunes-Dinis, 1993).

The Substance Abuse and Mental Health Services Administration (SAMHSA), through the Center for Substance Abuse Treatment (CSAT), awarded 27 five-year grants that supported 35 residential treatment projects for substance-abusing pregnant and postpartum women and their children in 1993 and 1995. This was in response to the 1992 amendments to the Public Health Service Act (PL 102-321). The \$113 million federal effort was specifically designed so that newborns, infants, and other minor children could live in the residence with their mothers. The impetus for establishing the program came from legislation and increasing focus on research corroborating the significant consequences of substance abuse for women and their children (Clark, 2001).

The 1994 Crime Bill included, for the first time, a substantial sum provided for treatment of inmates in state and local correctional systems. The Residential Substance Abuse Treatment (RSAT) for State Prisoners Formula Grant Program legislation created an opportunity for states to apply for funds to establish residential substance abuse programs beginning in 1996. In conjunction with this legislation, Congress authorized

spending \$270 million for the first five years of the program, the largest sum ever for the development and enhancement of substance abuse treatment programs in state and local correctional facilities. The RSAT Legislation encourages the development of a residential treatment model. The research showed that prison-based therapeutic community programs can significantly reduce recidivism and drug relapse. Other viable treatment approaches, including cognitive skills training, behavioral programming, vocational methods and even Twelve-Step programming were also encouraged (Lipton, 1998).

On May 14, 2001, SAMHSA, CSAT announced the availability of funds to encourage minority communities to strengthen and enhance substance abuse treatment systems for adult racial/ethnic minority populations. The program had two primary goals. The initial goal was to support communities in their development of infrastructure and links among community organizations to improve the quality, effectiveness and efficiency of substance abuse treatment services in minority communities. The second goal was to reduce disparities in access to care. Approximately \$2.5 million was made available to fund 5 to 8 cooperative agreements. The average award ranged from \$300,000 to \$600,000 per year. Grants were awarded for up to three years. Applicants were public and domestic private non-profit entities including states, Tribal or local governments, and community-based faith-based organizations (SAMHSA, 2001).

Approximately \$4 million were made available in 2001, by the federal government, to fund up to 19 grants in two program "tracks." Track I was for newly-formed or newly-forming recovery community organizations and Track II was for

organizations that wished to expand or intensify existing programs or replicate program models in another setting. The average award for a Track I grant ranged from \$175,000 to \$200,000 per year for a period of up to five years. The average award for Track II was from \$225,000 to \$275,000 per year for up to three years. Applicants were domestic private nonprofit organizations, such as community-based organizations, universities, faith-based organizations, and State and local governments (SAMHSA, 2001).

In 2002, the U.S. House of Representatives voted 393-30 to approve the \$396 billion health, education, and labor appropriations bill, which included funding for most leading federal substance abuse related programs. The bill included a \$60 million increase in the federal substance abuse block grant, a \$23 million increase in the budget of the Center for Substance Abuse Prevention, and a \$35.5 million increase in the Center for Substance Abuse Treatment budget. The measure also called for a \$107 million hike in the budget of the NIDA (House Passes Labor/HHS Funding Bill, 2002).

October 2002, SAMHSA announced it was making 115 awards over five years totaling \$156.5 million to fund substance abuse prevention and treatment programs for people at risk of HIV. The targets were racial and ethnic minority groups and were designed to enhance and expand substance abuse treatment and outreach services, pretreatment and prevention services in conjunction with community-based HIV/AIDS services. The awards were offered in five-year and one-year grants and were aimed at communities with an annual AIDS rate of 10 per 100,000 or higher, or communities in metropolitan statistical areas with annual AIDS rate of 20 per 100,000 or higher among minority communities (SAMHSA, 2004).

The federal government allocated nearly \$11.4 billion in 2003 for drug education, incarceration, intelligence, interdiction and treatment. Many state governments and local municipalities also committed significant portions of their annual budgets to counter-drug programs (National Drug Intelligence Center, 2005).

From 1998 – 2003, SAMHSA-CSAT provided grant funds to community organizations to mobilize and establish a variety of local, state, or regional recovery communities. CSAT recognized the need to bring the recovery community actively into the public dialogue regarding alcohol and drug use problems. The five core principles were keeping recovery first; cultural diversity and inclusion; authenticity; participatory process; and leadership development. Thirty recovery communities were funded in over four years. The program was expanded in 2003 to include innovative peer-to-peer recovery support services in community settings. The services were expected to expand the continuum of recovery by offering strength-based recovery support services. The RCSP grants were funded to assess patient, family and other stakeholder strengths and resources, as well as community-specific recovery support needs. Additional activities were to develop and strengthen collaborative relations with other area service providers and to develop a plan for delivering peer-to-peer recovery support services. The final activities included delivery of services and documenting and evaluating the service program, using demographic and qualitative methods. Nineteen projects were funded in 1998 in the amount of \$3.6 million. Twenty-one projects were funded in 2001 receiving a total of 4.8 million and in 2003 ten awards were made for a total of 3.25 million (SAMHSA, 2004).

SAMHSA provided up to \$7 million for Residential Treatment for Pregnant and Postpartum-Women and Residential Treatment for Women and Their Children in 2004. The funds were divided into 14 awards with the maximum allowable award being \$500,000 in total costs per year for up to three years. The goal was to expand residential substance abuse treatment services for pregnant, postpartum or other parenting women, and their children who are low-income and age 18 and over. Minority women were priorities. Although some minor children did not reside in the treatment facility with their mothers, they were expected to engage in treatment with them (SAMHSA, 2004).

August 2004, President Bush announced \$100 million in Access to Recovery grants to provide people seeking substance abuse and alcohol treatment with vouchers for a range of appropriate community-based services. The vouchers allowed substance abusers to choose their own treatment program. They also expanded access to a broad array of clinical treatment and recovery support services, including services provided by faith- and community-based programs, and increased substance abuse treatment capacity. Fourteen states and one tribal organization were awarded three-year grants - California, Connecticut, Idaho, Illinois, Louisiana, Missouri, New Mexico, Texas, Washington and Wisconsin were awarded \$7.6 million per year; Florida was awarded \$6.8 million per year; New Jersey was awarded \$4 million per year; Tennessee was awarded \$5.9 million per year; Wyoming was awarded \$978,000 per year; and California Rural Indian Health Board was awarded \$5.9 million per year. President Bush has proposed doubling the funding for Access to Recovery in 2005 to help even more of those seeking treatment (Medical News Today, 2004).

SAMHSA-CSAT (2004) announced the availability of \$16 million for fiscal year 2005's Targeted Capacity Expansion (TCE) Grants program. The purpose of the TCE was to expand and/or enhance the community's ability to provide a comprehensive, integrated, and community-based response to a targeted, well-documented substance abuse treatment capacity problem and/or improve the quality and intensity of services. Projects are funded in three categories: treatment for selected native populations (American Indian/Alaska Native or Asian American/Pacific Islanders); treatment focused on methamphetamine and other emerging drugs in adult, rural populations; and campus screening and brief intervention (SBI).

This decision was based on information reported to SAMHSA, indicating a significant disparity between the availability of treatment services for persons with alcohol and drug use disorders and the demand for such services. It has been estimated that there are 3-5 million individuals who use and abuse alcohol and drugs who have a significant impact on the utilization of services and costs within the health care, child welfare, juvenile justice, welfare, and other publicly funded social support systems. However, the capacity for service is only 1.8 million. The intent of the TCE program was to provide needed treatment services to reduce the health and social costs of substance abuse and dependence to the public, and increase the safety of American's citizens, by reducing substance abuse related crime and violence (SAMHSA, 2004).

The President is committed to continuing the ATR voucher program. The fiscal year 2006 budget included an increase of \$50.8 million over the fiscal year 2005 enacted level of \$150 million. The vouchers will continue to allow ATR to promote patient

choice, expand access to a broad range of clinical treatment and recovery support services and increase substance abuse treatment capacity. The vouchers may also be used to access various services, including those provided by faith- and community-based programs. This program is the result of the convergence of numerous forces demanding customer choice, increased cost-effectiveness, accountability and results. ATR seeks to leverage the twin benefits of patient choice with careful Federal oversight and performance measurement, rewarding high-performing providers (Office of National Drug Control Policy, 2005).

The SAMHSA – Screening, Brief Intervention, Referral and Treatment (SBIRT) supports one of the National Drug Control Strategy’s goals to intervene early with substance abusers and stop drug use before it leads to dependence. The initiative is expected to improve treatment delivery to achieve a sustained recovery for those who are dependent on drugs. SBIRT will expand the continuum of care available to include screening, brief interventions, brief treatments and referrals to appropriate care. The programs will be placed in both community and medical settings such as emergency rooms, trauma centers, health clinics and community health centers. This will allow the program to reach a broad segment of the community (Office of National Drug Control Policy, 2005).

President George W. Bush’s 2007 budget includes \$12.3 million cut in funding for Center for Substance Abuse Prevention to \$180.6 million, Center for Substance Abuse Treatment will receive \$175.4, a decrease of \$23.5 million, Substance Abuse Prevention and Treatment Block Grant program at same level as current amount of

\$1.7586 billion and Access to Recovery program funded at \$98 million and includes a new Voucher Incentive Program, funded at \$7.5 million, for up to 25 grant awards of \$1 - \$5 million to expand patient choice through vouchers. Another voucher program, for methamphetamine received \$25 million to fund about ten \$2.5 million grants for treatment and recovery support services. The Safe and Drug-Free Schools and Communities State Grants Program was again eliminated from the budget. The National Institute on Alcohol Abuse and Alcoholism received \$433 million, representing a \$3 million decrease and the National Institute on Drug Abuse received \$955 million, representing a \$5 million decrease. Drug Court program received \$69 million, a \$59 million increase and Reentry Initiative received almost \$60 million to be spread among programs in the departments of Justice (\$15 million), Labor (\$20 million) and Housing and Urban Development (\$25 million) (NCADD, 2006).

Illicit Drug Use and Treatment

The 2003 National Survey on Drug Use & Health provides data from survey interviews of approximately 67,500 persons. The report indicated that in 2003, an estimated 19.5 million (8.2 percent) of the American population aged 12 or older, were illicit drug users. Marijuana was the most commonly used illicit drug, with a rate of 6.2 percent (14.6 million) and an estimated 2.3 million (1.0 percent) persons were cocaine users, 604,000 of whom used crack. There were an estimated 119,000 heroin users and 1.0 million people used hallucinogens. An estimated 6.3 million persons were current

users of psychotherapeutic drugs and 4.7 million were estimated as using pain relievers (U.S. Department of Health and Human Services, 2004).

The 2003 National Survey also identified rates of illicit drug use among the major racial/ethnic groups. Rates were highest among American Indians or Alaska Natives (12.1 percent) and Native Hawaiians or Other Pacific Islanders (11.1 percent). Rates were 8.7 percent for African-Americans, 8.3 percent for Caucasians, and 8.0 percent for Hispanics. Asians had the lowest rate at 3.8 percent (U.S. Department of Health and Human Services, 2004).

In conclusion, The 2003 National Survey found that an estimated 18.2 percent of unemployed adults aged 18 or older were current illicit drug users compared with 7.9 percent of those employed full-time and 10.7 percent of those employed part-time. Seventy-four point three percent were employed with full or part-time. An estimated 3.3 million (1.4 percent) of the population age 12 or older, received some kind of treatment for a problem related to alcohol or illicit drug use. The estimated number of persons aged 12 or older needing treatment for an alcohol or illicit drug problem was 22.2 million (9.3 percent) of the total population (U. S. Department of Health and Human Services, 2004).

The evolution of the Federal treatment system during the 1970s led to a major evaluation study. The Treatment Outcome Prospective Study (TOPS) involved follow-up of samples from a population of 11,750 patients admitted to drug abuse treatment in 41 programs during 1979-81. The TOPS project replicated many of the findings of previous studies, to include the effectiveness of treatment in reducing drug use and criminal activity during and after treatment, and the importance of length of time in treatment.

The study also indicated that from 1969 to 1974, most patients sought treatment for heroin use, and by 1980, many of those entering treatment reported patterns of multiple-substance abuse. The use was seemingly dictated by both availability and pharmacological effect (Pickens, Leukefeld & Schuster, 1991).

The Services Research Outcomes Study (SROS) was the first nationally representative study of substance abuse outcomes. The study was a follow-on to the 1990 Drug Services Research Survey (DSRS). The SROS provided for a five-year post-discharge follow-up of a broadly representative sample of approximately 3,000 substance abuse patients treated during 1989 to 1990. The study monitored their behavior up to five years, after the 1989-1990 treatment episode, and analyzed treatment results in light of the type and cost of treatment services the patients received. Post-treatment variables included employment; criminal justice status, such as probation or incarceration; and further treatment episodes. The results confirmed that both drug abuse and criminal behavior were reduced following drug abuse treatment in inpatient, outpatient and residential treatment programs (U.S. Department of Health and Human Services, 2004).

A Congressionally mandated five-year study was conducted by the National Treatment Improvement Evaluation Study (NTIES) (1997), on the effectiveness of drug and alcohol treatment programs, that received public support in fiscal year 1990-1991, from SAMHSA-CSAT. Substance abuse treatment patients were interviewed at admission to treatment, when they left and at follow-up approximately twelve months after the end of treatment. The final analysis conducted on 4,411 respondents offered evidence that positive outcomes for substance abuse treatment are sustained over time.

Results of the five-year study included an increase of employment by twenty-five percent, with nearly half of the respondents reporting employment. Their income rose modestly, up to six percent. Patient's use of their primary drug declined from 38 percent to 73 percent one year after treatment. Arrests of the women declined by 67 percent and there was an 82 percent decrease in respondents selling drugs; 88 percent decrease in reported shoplifting; and an 89 percent decrease in reports of beating someone up. The impact on criminal activity, one year after treatment, indicated that selling drugs declined by 78 percent; shoplifting or arrests for shoplifting declined by 82 percent; beating someone up declined by 78 percent; arrests for drug possession declined by 51 percent; arrests for any crime declined by 64 percent; those who reported supporting themselves through illegal activity declined by 49 percent; and those having sex for drug/money declined by more than 50 percent (NTIES, 1997).

Flynn, Kristiansen, Porto and Hubbard (1999), conducted a study with 502 cocaine-dependent patients in long-term residential (LTR) and outpatient drug-free (ODF) treatments, selected from a national and naturalistic non-experimental evaluation of community-based treatment. The patients were participating in the Drug Abuse Treatment Outcome Studies (DATOS). The objective of the study was to calculate the tangible cost of crime to society and determine treatment benefits. Treatment cost was estimated from the 1992 National Drug Abuse Treatment Unit Survey (NDATUS), and the costs of crime were estimated from reports of illegal acts committed before, during, and after treatment. Results showed that the patients treated in both LTR and ODF programs had reductions in costs of crime after treatment and yielded the greatest

benefits. Cost-benefits for both modalities of treatment provided evidence of significant returns on treatment investments for cocaine abuse.

The Massachusetts Department of Public Health, Bureau of Substance Abuse Services (BSAS) works with organizations throughout the Commonwealth, that provide substance abuse prevention and treatment, to promote an integrated, consumer-focused continuum of substance abuse services. The services are responsive to the public health prevention and treatment needs of individuals, families and communities. Reports from several systems maintained by the Bureau indicated that treatment works. Findings indicated that patients in residential treatment programs significantly improved their employment status and abstinence rates. Significant improvements in employment were seen for both women and men, in residential substance abuse treatment, as well as for African Americans, Caucasians and Latinos. Patients in opioid treatment reported significantly more employment, less crime, and fewer admissions in hospitals, emergency rooms and detoxification services. Supportive housing patients, particularly women and Latinos, increased their levels of part-time employment between admission and discharge. The outcomes can be translated into improved quality of life for substance abusers, their families and communities through improved health, social functioning, legal involvement and employment. The improvements led to cost savings through lower health care and crime costs and increased productivity and earnings (Brolin, 2000).

Flynn, Porto, Rounds-Bryant & Kristiansen (2003), conducted a study to determine the cost and benefits of opioid treatment. It concentrated on costs of opioid treatment, the positive monetary returns from investments on long-term opioid treatment

for opioid/heroin users, who participated in the National Institute on Drug Abuse (NIDA) Drug Abuse Treatment Outcome Studies (DATOS). The focuses were on crime cost savings for discharged patients, who left their treatment program before completing one year of treatment, and patients, who continued in treatment for one year or longer. The subjects were 394 opioid treatment patients from 8 medium to large cities and 16 programs. Thirty-seven percent were women and 33% were African American, with an average age of 37.2. The results supported the hypothesis with longer retention or greater lengths of stay in treatment associated with greater crime cost savings. It was concluded that opioid treatment provides significant returns on treatment investments for both discharged and continuing patients.

Hubbard, Craddock and Anderson (2003), conducted a follow-up study from the DATOS 1-year and 5-year follow-ups. The study was used to describe the long-term outcomes of drug treatment and to further clarify the relationship between treatment duration and post-treatment outcomes, in four treatment modalities: outpatient opioid treatment, LTR, ODF, and short-term inpatient. Methods employed replicated those used in earlier analyses of the DATOS (a experimental longitudinal study conducted within the natural settings of 96 treatment programs in the United States) 1-year follow-up of 2,966 patients admitted to treatment in 1991-1993 and the TOPS patients admitted in 1979-1981. Patients were followed during and after treatment at specified periods of time. Drug use and behaviors were evaluated for the year prior to treatment and post-treatment time frames defined by the 1- and 5-year follow-ups. The 5-year stratified follow-up sample included 1,393 of the same participants in the 1-year follow-up sample.

Reduction in illicit drug use in the year after treatment, by patients, was associated with longer treatment durations, especially 6 months or more in LTR and ODF. Results also indicated reductions in illegal activity and increases in full-time employment, due to stays of 6 months or longer in treatment. Overall, the combined results suggested the stability of outcomes of substance abuse treatment.

The results of research conducted by Patkar, Thornton, Mannelli, et al (2004), indicated that treatment outcomes of multi-substance abusers are no worse than those of other patients receiving outpatient substance abuse treatment. The patients for the study were recruited from individuals applying to participate in a 12-week outpatient substance abuse treatment program in Philadelphia. The subjects in the multi-substance group reported use of cocaine, alcohol, marijuana, opiates and benzodiazepines, in various combinations. According to the researchers, all patients improved significantly during outpatient treatment, regardless of their substance(s) of abuse and despite the multi-substance abusers greater problems. They reported a significantly greater preference for total abstinence as a treatment goal, than did the other two groups.

Woolis, Cyphers and Roth (2000) stated, in their article *Recovery: An Act of Work*, that states are mapping out ways to help people move to employment and to recovery. They reported that in a two year study conducted by the National Center on Addiction and Substance Abuse at Columbia University, the American Public Human Services Association and the Substance Abuse Policy Research Program at the Robert Wood Johnson Foundation, it was determined how states were responding to substance abuse among welfare recipients in the early stages of welfare reform. The findings were

the outcome of an analysis of late 1997 survey responses from administrators of employment and substance abuse treatment training participants from Medicaid and the Temporary Assistance to Needy Families (TANF) programs in fifty-one U.S. states and territories; five state case studies; and interviews with government officials in twelve states. The findings indicated that TANF administrators consistently identified substance abuse among participants as a critical problem. Approximately twenty percent or more of their TANF participants needed to address their substance abuse problems.

According to SAMHSA's National Survey of Drug Use and Health, an estimated 7.7 million persons, ages 12 or older, needed treatment for substance abuse problems and countless of these individuals did not receive it. Of the 7.7 million, only 1.4 million individuals received treatment at a specialty substance abuse facility and 362,000 reported they knew they needed treatment. Approximately 88,000 sought treatment but were unable to get the treatment they needed (National Association for Children, 2003).

NIDA stresses that the ultimate goal of all drug abuse treatment is to enable the abuser to achieve lasting abstinence. The immediate goals however, are to reduce drug use, improve the patient's ability to function and minimize the medical and social complications of drug abuse - the more treatment given, the better the results (Drug and Substance Abuse, 2004).

Many public and private service organizations, such as the welfare system, the criminal justice system, emergency rooms, orphanages, employment assistance programs and family violence centers, come into contact with people who are experiencing substance abuse related problems. These organizations often refer substance abusers

from their caseloads to substance abuse treatment as a means of dealing with the problems. The expectation is an “effective” treatment for substance abuse to reduce the serious medical and public health risks associated with substance abuse (United Nations, 2003).

Family Relationships and Substance Abuse

Social supports have been widely studied in the substance abuse field. It can be conceptualized as the availability of relationships that are not conflict-producing and supportive of abstinence. Stressful life events, such as the loss of a job, bereavement, or the ending of a personal relationship, may bring to bear a more powerful effect in determining individual outcomes, than treatment itself. Treatment goals may not be reached at all, or the individual may relapse, if the environment resources are limited. Effective treatments for substance abuse should look beyond the program to assist the patient in becoming included in society and improving family relationships and personal resources (United Nations, 2002).

The family of origin continues to be a powerful determinant of the substance abuser’s current behavior, even when he/she is a young adult. The validity of this statement may not be immediately obvious, especially since many substance abuse patients are in their 30’s and are often married and have children. Even with married patients, the family of origin rather than the family of procreation tends to have primary importance. Efforts to stabilize the patient’s marriage without first involving his/her parents are likely to fail (Grabowski, Stitzer and Henningfield, 1984).

Research suggests that substance abuse has distinct effects on different family structures. Some examples might be that the parent of small children may attempt to compensate for deficiencies that his or her substance-abusing spouse has developed, as a consequence of illicit drug use. Children may act as surrogate spouses for the parent who abuses substances, by developing elaborate systems of denial as protection against the reality of the parent's addiction. In a single-parent household, children are likely to behave in a manner that is not age-appropriate, to compensate for the parental deficiency. The aging parents of substance-abusing adults may maintain inappropriate dependent relationships with their grown offspring, missing the necessary "launching phase" in their relationship, that is so vital to the maturational processes of all family members involved (U.S. Department of Health and Human Services, 2004).

The effects of substance abuse often extend beyond the nuclear family to extended family members. Family members may experience feelings of abandonment, anxiety, fear, anger, concern, embarrassment, or guilt. Some family members may wish to ignore or cut ties with the substance-abusing person. Others may feel the need for legal protection from the person. Regardless of the effect, it may continue for generations. These intergenerational effects, of substance abuse, can have a negative impact on role modeling, trust, and concepts of normative behavior. This could also damage the relationships between generations of family members (U.S. Department of Health and Human Services, 2004).

Substance abusers usually find themselves increasingly isolated from their families. They often prefer associating with others who abuse substances or participate in

some other form of antisocial activity. This allows them to support and reinforce each other's behavior (U.S. Department of Health and Human Services, 2004).

According to Serovich (2001), just believing that help from family would be available is comforting for some substance abusers. Many substance abusers are rejected by family members and receive minimum support, if any, during this devastating time in their lives.

Substance abusers' preoccupation with illicit drugs and their effect on mood and performance, can lead to marital problems and poor work performance or dismissal. Drug use can disrupt family life and create destructive patterns of codependency. The spouse and/or other family members, out of love or fear of consequences, inadvertently enables the user to continue using drugs by covering up, supplying money, or denying there is a problem (Drug addiction and drug abuse, 2005).

According to Kinney and Leaton (1995), the substance abusing person is almost like a boarder in the family household. Family members expect little and they give little to the issues. This allows the family members to maintain some sense of stability and continuity for themselves. In many instances the entire family life is constantly drug centered, with the family feeling as if they are responding to constant crises.

Family members can be important sources of energy, competence, motivation and support for addressing substance abuse problems. For example, Marlowe, Merikle, Kirby, Festinger and McLellan (2002) interviewed 415 substance abusers across 7 different kinds of treatment programs, during admission, and found that most of them reported family pressure as the predominant influence in their seeking treatment.

In a study conducted at the University of California, Los Angeles, Dr. Robert Fiorentine and his colleagues found that the women in their sample were less likely than the men to relapse. The scientists followed 182 women and 148 men in 26 public outpatient drug abuse treatment programs in Los Angeles County. The services provided were group, individual, and family counseling; educational activities; and referrals to other health and social services. In the six months between interviews, only 22 percent of the women compared to 32 percent of the men relapsed to drug use. According to the researchers, one possibility was that the women received more social support than the men from a variety of sources, such as families, friends and coworkers. The researchers found that although the women were more likely than the men to maintain social network, they were no more likely than men to receive emotional support for their problems and encouragement to stop using drugs (Stocker, 1998).

Solomon (2000), stated that many of the family education programs were developed by families in response to their feelings of being misunderstood by professionals with whom they had contact, of being excluded from the treatment process, and being dissatisfied with what providers offered in the way of support and information. Many family members feel that they do not need treatment, but rather practical, hands-on assistance with resolving problems.

Fals-Stewart and O'Farrel (2003), conducted a study with one-hundred-twenty-four men who were entering opioid treatment and living with a family member. The men were randomly assigned to one of two twenty-four week treatments: (a) behavioral family counseling (BFC) and individual treatment or (b) individual-based treatment (IBT) only.

The results were that the BFC participants attended more scheduled treatment sessions, had more days of abstinence from opioids and other drugs and had fewer drug-related, legal, and family problems at the one-year follow-up.

In another study conducted by Ellis, Bernichon, Ping Yu, Burgdorf, Herrell and Roberts (2002), a cohort of 1,758 patients were interviewed at treatment admission, and 1,181 were followed-up 6 months after discharge from treatment to examine the influence of family functioning, activities of friends and substance abuse by spouses on women's substance abuse relapse. The results were that activities such as families getting along and supporting each other, during the post-discharge period, were significantly associated with a decreased probability of relapse, while negative activities such as family altercations and drug use or criminal activity, by friends, were associated with increased likelihood of relapse. The study also found that spousal substance abuse during the post-discharge period was significantly associated with increased probability of patient relapse.

Family factors may play an important role in the etiology of substance abuse, particularly in determining whether a young person will move from drug experimentation to a pattern of chronic abuse and dependence. The behavior of the substance abuser may help the family avoid difficulties in negotiating transitions in the family life cycle, especially the stage of "leaving home" (Grabowski, Stitzer and Henningfield, 1984).

MACRO Systems researchers interviewed 462 patients and found that the family was seen as second only to treatment (70.9% vs. 79.6%) as an important influence in change. It was found that those whose treatment is successful typically have family support. However, it is worth noting that with alcohol it is typically the spouse, not the

parents, who is most important. Regardless of the mode of treatment, family and spouse involvement adds significantly to the probability of success (Grabowski, Stitzer and Henningfield, 1984).

Family involvement, in substance abuse treatment, usually takes the form of family counseling or family education. Some substance abuse programs hold short family education sessions about treatment, substance use disorders and their effects on the family, and family dynamics. Family counseling usually entails one or more discussion sessions that provide information and allow participants to acknowledge their feelings and concerns. Other programs may have monthly family nights or informal gatherings for ongoing communications between patient families and counselors. These forums help secure family support for patient treatment and identify acute family problems (U.S. Department of Health and Human Services, 2005).

Employment and Substance Abuse

Unemployment and welfare costs have been public and policy concerns in recent years. Those with substance abuse problems among the welfare population may be referred to substance abuse treatment with the expectation that "effective" treatment will improve the vocational and employment prospects of their referrals. Contractual agreements are usually established between public service agencies and substance abuse programs to ensure that the expected goal is met (United Nations, 2003).

The success of approximately 40 percent of former Aid to Families with Dependent Children (AFDC) heads of household, and an unknown number of children,

depends on substance abuse treatment and prevention. Substance abuse is a major barrier to getting and keeping a job for these welfare recipients and their families. Treatment and wraparound services must be seen as an important element of the welfare-to-work equation. Nancy K. Young and Sidney L. Gardner argue that we must seize the opportunity to demonstrate how much the substance abuse field can contribute to helping other social service agencies achieve their goals. Failure to do so would constitute a failure of accountability to U.S. taxpayers. Substance abuse may pose the largest single obstacle for many welfare recipients, in their ability to secure and keep jobs. Without effective treatment services, these individuals will be unlikely to succeed in their welfare-to-work transition (SAMHSA, 1998).

Many people with drug abuse problems have difficulty with obtaining and retaining paid employment. Unemployed drug abusers are more likely to drop out of treatment prematurely and start using drugs again. Although the ability of a treatment program to secure a job for the abuser may be limited, many programs will seek to help the abuser improve employment opportunities because maintaining a job is recognized as an important goal. Employment has been found to predict retention in treatment and positive outcome. For example, in a study of primarily employed, multiple substance abusers entering private inpatient or outpatient programs, McLellan and colleagues found that employment problems were one of the most significant predictors of post-treatment substance abuse and other aspects of poor health and social functioning (United Nations, 2002).

From July 1994 to June 1996, 5,664 individuals were studied to assess the effect of substance abuse treatment on employment outcomes and earnings among AFDC clients, admitted to treatment in Washington State. The study found that substance abuse treatment had positive effects on employment and earnings among AFDC clients. It is important to emphasize that despite gains in income, following substance abuse treatment, earnings, among the AFDC clients, in the sample, remained quite low. Unless AFDC clients receive vocational services, in conjunction with substance abuse treatment, they will probably not be able to become economically self-sufficient. There is also a very real possibility that AFDC clients, who are not able to obtain employment, may be forced to rely on other local and State health and welfare systems, once their time allotment for financial assistance under Temporary Assistance to Needy Families (TANF) is exhausted. If this happens, the costs of operating these health and welfare systems will increase (SAMHSA, 2001).

The belief that most people who use illicit drugs are unemployed and reside in impoverished parts of inner cities is a myth. In 1997, 70 percent of the 6.3 million persons between the ages of 18 and 49 years old who reported using illicit drugs were full-time employees (Marwick, 1998).

Substance abuse in the workplace costs businesses between \$75 billion and \$100 billion annually in lost time, accidents, higher health-care and workers' compensation cost, according to the U.S. Department of Labor. Some larger foodservice operators have taken steps to address the problem of substance abuse, but most indicate that cost restrict their efforts (Zuber, 1997).

Based on data from the 1993 National Household survey on Drug Abuse, 28 percent of employed individuals in the United States have used an illicit drug at least once within the past year. The statistics have changed little from the early 1980s, causing drug use in the workplace to be targeted by employers and policymakers for possible intervention (French, Zarkin & Dunlap, 1998).

Many employers have established employee assistance and drug testing programs, due to concern about workplace productivity, absenteeism, and safety. In a study conducted by French, Roebuck, and Alexandre (2001), the probability of employment and labor force participation, was estimated for different types of drug users using nationally representative data from the 1997 National Household Survey on Drug Abuse. The findings indicated that chronic drug use was significantly related to employment status for both genders. The results also indicated that male chronic drug users were less likely to participate in the labor force. However, no significant relationship was identified between chronic drug use and labor force participation for females.

In September 1987, with the sponsorship of the federal government, the Postal Service initiated a major pre-employment drug testing study. The aim of the study was to determine the relationship between drug use and job performance. Between September 1987 and May 1988, 5,465 applicants were tested. Of the 4,375 applicants who were hired, 395 tested positive for illicit drugs. After 1.3 years, the test-positive group was heavy leave users compared to those who did not test positive. After almost 2 ½ years, the positive testers were absent almost 10 percent of the total work hours scheduled and at 3.3 years, they were absent 11 percent of the scheduled work hours. Fourteen percent

of the test-positive group had been referred to the company's employee assistance program (EAP) and they had a tendency to face disciplinary action more often than the test-negative group (Current, 2002).

Construction workers (17.3 percent), food service workers (16.3 percent) and waiters and waitresses (15.4 percent) reported the highest rates of illicit drug use, while police officers (1 percent), teachers (2.3 percent) and child care workers (2.6 percent) reported the lowest, according to a study by SAMHSA. Men working in construction, food preparation and service entertainment, and the cleaning field reported the highest rates of illicit drug use. Women working as food preparers, lawyers and legal assistance, and social workers, reported the highest rates of illicit drug use. In general, unmarried workers reported illicit drug use at about twice the rate of married workers. According to the results of the study, the rate of reported illicit drug use decreased from 16.7 percent in 1985 to 7 percent in 1992 and remained steady through 1993 (Illicit Drug Use, 1996).

In a survey of 1,421 full-time restaurant workers over a three-year period, 16.5 percent reported that they used illegal drugs. It was indicated that more than 400,000 foodservice employees – more than 4.2 percent of the industry's total workforce used illicit drugs. Ranking second behind foodservice employees are writers, artists and entertainers (15.7 percent) and workers in the construction trades ranked third (14.4 percent). Of the 33,505 full-time workers surveyed, 7.3 percent reported using illicit drugs in 1993 (Zuber, 1997).

In a survey conducted by Minnesota-based Hazelden Foundation (2003), as part of the launch of its "Making Recovery America's Business" corporate education campaign,

nearly one in four human resources professionals surveyed revealed that their companies are less likely to hire a job candidate if the individual is in recovery from substance abuse. Eighty-nine reported believing treatment to be effective in helping those employees fight their illness. The survey revealed that despite evidence that human resource professionals recognize that substance abuse treatment works and that recovering employees come back after treatment as productive members of their companies, this enlightened knowledge is not translated into the practice of directing employees into treatment (Health & Medicine Week, 2003).

The Substance Abuse Prevention and Treatment (SAPT) block grant is the cornerstone of states' substance abuse programs. It accounts for 51 percent of public funds expended for prevention and treatment. One element proposed in lieu of the block grant is performance partnership. This partnership offers states greater flexibility to use federal funds and create accountability systems built on performance. In a study of California residents with substance abuse disorders, improvements in employment rates were as high as 60 percent from admission to discharge. Likewise, in a study in Missouri, employment rates improved by 136 percent from admission to discharge and there was a 60 percent decline in absenteeism among working patients in treatment in Ohio. In Oregon, patients increased weekly earnings from \$154 to \$278 in 3 years after treatment; 5,700 patients followed in the year after treatment, 18.7 percent increased in employment; and in Kansas, earnings were 33 times higher after completing treatment (U.S. Department of Health and Human Services, 2001).

According to the Treatment Episode Data Set (TEDS) Highlights of 2003 report, substance abusers admitted to treatment for alcohol were the most likely to be employed. Those admitted for smoked cocaine and heroin were the most likely to be unemployed. Admissions for inhalants, tranquilizers and sedatives frequently reported that they were not in the labor force (SAMHSA Office of Applied Studies, 2005).

The U.S. Department of Labor Employment and Training Administration (2004), concluded that the link between unemployment and substance abuse creates a vicious cycle of entering and reentering the workplace. Sixteen percent of the unemployed individuals reported illicit drug use. The prevalence of substance abuse problems among welfare recipients estimate varies from 6.6 percent to 37 percent. Although it is not clear whether substance abuse leads to unemployment or vice versa, it is clear that interventions are needed to help those in recovery obtain the necessary resources and support to go to work.

There is a substantial rise in employment among welfare recipients who successfully complete substance abuse treatment. According to a 1998 Center for Substance Abuse Treatment report, the State of Florida reported a 76 percent increase in employment after treatment, and California reported a 60 percent increase. A Kansas State University study revealed an average monthly income at 6 months after treatment increased 33 times over the average employment income before entering treatment. From pretreatment to the follow-up period after treatment, there was a 50 percent increase in the number of days worked in the previous month. In an extensive cost-effective study conducted by the Ohio Department of Alcohol and Drug Addiction Services, it was

further emphasized that treatment plays an integral role not only in achieving work readiness but also in enhancing job performance (SAMHSA, 1998).

A growing number of employers have initiated programs designed to detect substance abusers in the workplace and to refer them to treatment programs. These employers are typically interested in the return of affected employees to a high level of work performance following treatment and an assurance for co-workers that they will not be put in danger (United Nations, 2003).

What employers want most are workers who will show up on time, are able to follow verbal instructions, are able to get along with others, and are drug free. According to the Office of National Drug Control Policy, untreated substance related issues cost American businesses from \$50 to \$100 billion each year in increased medical claims and disability costs from illness and injuries, theft, absenteeism, and decreased productivity. Therefore, substance abuse prevention, intervention, and treatment systems must become highly valued in the context of welfare reform and workplace productivity (SAMHSA, 1998).

Overview of Substance Abuse Treatment

Referrals to substance abuse treatment programs often come from an organization, institution or family member, who has become aware of the abuse indirectly, through recognition of what are considered to be substance abuse related issues - social, family, financial, employment and/or medical problems. During the last decade, problems of crime, workplace safety and spread of various infectious diseases and neonatal health

have come to be considered problems related to substance abuse. Referrals are initially based upon the extent to which organizations and agencies believe that an observed problem is attributed to substance abuse; reduction of the substance abuse problem would be instrumental in producing a desirable change; and substance abuse treatments can produce the desired reduction of the substance use and the observed problem (United Nations, 2003).

Treatment of substance abusers depends upon the severity and nature of the problem, motivation, and the availability of services. Some substance abusers may come into treatment voluntarily and have the support of family, friends and workplace; others may be mandated to treatment by the courts against their will and have virtually no support system (Drug addiction and drug abuse, 2005).

Until the mid-1920s substance abuse treatment was focused on the problem of opiate abuse. It was delivered primarily by private practitioners and was concerned mainly with the medical management of the opiate abstinence syndrome. The growing number of opiate abusers in Federal prisons led to the opening of the Public Health Service (PHS) hospitals in Lexington, Kentucky, in 1935 and at Fort Worth, Texas in 1938. These hospitals provided the earliest systematic data on treatment outcome of drug abusers. Treatment consisted of withdrawing the abusers from opiates to minimizing the abstinence syndrome, then providing them with a drug-free environment in which to recover. These early efforts were regarded as ineffective, with many patients failing to complete treatment and high relapse rates following treatment (Pickens, Leukefeld & Schuster, 1991).

In the 1960s two new forms of treatment gained prominence – the therapeutic community (TC) and methadone maintenance (MM). TC used mostly recovering abusers as opposed to professional staff, to resocialize patients to an abstinence-oriented lifestyle in a residential setting. TC was exemplified by Synanon, which was founded in 1958 and evolved at least in part from the philosophy of Alcoholics Anonymous. TC was established as a viable treatment modality and laid the groundwork for the opening of other TCs. MM prevented the psychological craving and physiological effects of the opiate abstinence syndrome and, in sufficient dosages, blocked the euphoric effects of heroin also. Substance abusers who formerly engaged in crime to support their drug habits were able to engage in productive social behavior. Several MM programs were opened around the country (Pickens, Leukefeld & Schuster, 1991).

Until recently, the treatment paradigm was “one program fits all.” If a patient did not fit the program he/she was labeled “resistant,” “in denial” or “hard to treat.” This was further compounded by what could be called the “more ofs.” Because of this, there had been a perception in the field that some people were harder to treat, when, in fact, they only had different treatment needs (Kerr, 1998).

According to the 1999 report by the National Women’s Health Information Center on Drug Abuse and Treatment, more than 4 million women need treatment for drug abuse. Women receive the most benefit from drug treatment programs that provide comprehensive services for meeting their basic needs. Services that should be provided are access to food, clothing and shelter; transportation; job counseling and training; legal assistance; literacy training and educational opportunities; parenting training; family

therapy; medical care; child care; social services; social support; psychological assessment and mental health care; assertiveness training; family planning services; a continuing relation with treatment provider; support of the community; and encouragement of those closest to them.

For the past decade, experts in the field of substance abuse treatment have suggested that female-sensitive treatment would be more effective than traditional mixed-gender or combination female-sensitive/mixed-gender treatment. The findings, according to Dodge and Potocky-Tripodi (2001), in their study on three inpatient intervention strategies for substance abusing women, did not support this contention.

Studies conducted by the Improving Drug Abuse Treatment for AIDS-Risk Reduction (DATAR) project, which is a large-scale study of opioid treatment patients in three methadone treatment clinics in Texas, showed that four indicators had a positive effect on the length of time a patient stayed in treatment, and treatment outcome. The indicators were improvements in a patient's motivation; the therapeutic relationship between patient and counselor; the patient's engagement in treatment; and the patient's social environment outside treatment. The studies have been analyzing the drug abuse treatment process and developing new strategies and tools to advance the effectiveness of drug abuse treatment since 1989 (Mathias, 1996).

SAMHSA has done an exceptional job in the promotion of evidence-based practices. The Addiction Technology Transfer Centers (ATTCs) and the Treatment Improvement Protocols (TIPs) play an important role in the dissemination of best practice guidelines. Accreditation requirements for opioid treatment providers represent a

tremendous move forward for the field and holds significant promise for the promotion of evidence-based practice. SAMHSA recognize that many community treatment programs already provide excellent care. The Administration has several projects that document and evaluate these “model” programs, as well as a number of treatment projects that take empirically validated treatments and apply them in multiple community settings. The value of these programs cannot be underestimated because they help to identify barriers to implementation, demonstrate the real world utility of interventions known only to researchers, provides important information regarding cross-cultural relevance, and serve as models for policy makers and other treatment providers to consider (Iguchi, 2000).

In collaboration with the states, SAMHSA has identified ten domains as the National Outcome Measures (NOMs). The domains embody meaningful, real life outcomes for people who are striving to attain and sustain recovery, build resilience, and work, learn, live and participate fully in their communities. The first domain is abstinence from drug use and alcohol abuse or decreased symptoms of mental illness with improved functioning. Resilience and sustaining recovery consist of four domains. These include getting and keeping a job or enrolling and staying in school, less involvement with the criminal justice system, securing safe, decent and stable housing, and social connectedness to and support from others in the community – family, friends, co-workers and classmates. Two domains focus on the treatment process in terms of available services and services provided. One measure is increased access to services for both mental health and substance abuse and the other is increased retention in services for substance abuse while decreasing inpatient hospitalizations for mental health treatment.

The final three domains include patient perception of care, cost effectiveness and use of evidenced-based practices in treatment. These domains examine the quality of services provided (SAMHSA, 2005).

TEDS (2003), provides the most current data on reported drug use at treatment admission. The five major substances of abuse were alcohol (42 percent), opiates (18 percent), marijuana (15 percent), cocaine (14 percent) and stimulants (7 percent). Sixty-one percent of TEDS, 2003 admissions were to ambulatory treatment, 22 percent were detoxification and 17 percent were to residential treatment. TEDS only includes admissions to facilities that are licensed or certified by the State substance abuse agency to provide substance abuse treatment (SAMHSA Office of Applied Studies, 2005).

TEDS (2003) also provided information on the most frequently reported substance abuse treatment admission. The report identified the four most common substances according to racial/ethnic group. Among Caucasians, alcohol (46 percent) was the primary drug of choice, followed by opiates (16 percent), marijuana (14 percent) and stimulants and cocaine (9 percent each). Among African-Americans, alcohol was the primary drug of choice (33 percent), followed by cocaine (28 percent), opiates (16 percent) and less than one percent for stimulants (SAMHSA Office of Applied Studies, 2005).

The primary drug of choice for persons of Mexican origin was alcohol (39 percent), followed by stimulants (18 percent), opiates and marijuana (17 percent each) and cocaine (8 percent). Puerto Ricans reported opiates (48 percent) as their primary drug of choice, followed by alcohol (28 percent), marijuana (11 percent) and cocaine (10

percent). Persons of Cuban origin reported alcohol (34 percent) as the primary drug of choice, followed by cocaine (23 percent), opiates (20 percent), marijuana (16 percent) and stimulants (3 percent) (SAMHSA Office of Applied Studies, 2005).

Among Alaska Natives, alcohol was reported as the primary drug of choice (62 percent), followed by opiates (17 percent), marijuana (9 percent), and stimulants (5 percent). American Indians reported alcohol (62 percent) as the primary drug of choice, followed by marijuana (14 percent), stimulants (9 percent), opiates (7 percent) and cocaine (5 percent). Asian/Pacific Islanders reported alcohol (33 percent) as the primary drug of choice, followed by stimulants (26 percent), marijuana (19 percent), cocaine (11 percent) and opiates (9 percent) (SAMHSA Office of Applied Studies, 2005).

There are a variety of treatment strategies and treatments that can be used to correct or ameliorate substance related problems and provide continuing support for substance abusers. Strategies include such diverse elements as medications for psychiatric disorders, medications to relieve drug craving, substitute pharmacotherapies, group and individual counseling and therapy sessions to provide insight, guidance and support for behavioral changes, and participation in peer support groups to provide continued support for abstinence (United Nations, 2002).

Several studies and national outcome investigations have been conducted in the United States regarding drug-free counseling. Results indicate that abstinence-oriented counseling is associated with reductions in drug use and crime involvement together with improvements in health and mental stability. In one study, the number of patients using cocaine weekly or more frequently decreased from 41 to 18 percent at one-year follow-

up, while weekly or more frequently marijuana use was reduced from 25 to 9 percent and heroin from 6 to 3 percent. In a study of counseling for cocaine abuse, Alterman's group contrasted a structured day program delivering around 30 hours of counseling per week with an intensive four-week inpatient program. Significant improvements were seen for patients in both treatment settings at 7- and 12-month follow-up (United Nations, 2002).

The four most common treatment approaches are outpatient opioid treatment programs, which includes methadone maintenance, counseling and case management; long-term residential (LTR) programs (including therapeutic communities), outpatient drug-free programs (such as psychotherapy and 12-step programs), and short-term inpatient programs. In opioid treatment, patients are given an oral dose of synthetic opiate, administered at a dosage sufficient to block the effects of opiates. This allows the patient to disengage from drug-seeking and related criminal behavior and, with appropriate counseling and social services, become a productive member of his/her community. LTR programs are highly structured programs in which patients stay at a residence for 6 to 12 months. Patient in LTR programs include those with relatively long histories of drug abuse, involvement in serious criminal activities, and seriously impaired social functioning. The focus of this type of treatment is on socializing the patient to a drug-free, crime-free lifestyle. Outpatient treatment encompasses a wide variety of programs for patients who visit a clinic at regular intervals. Programs involve individual or group counseling. Patients entering these programs are abusers of drugs other than opiates. Short-term residential programs are often referred to as chemical dependency units and are based on the "Minnesota Model" of treatment of alcoholism. The programs

involve a 3 to 6-week inpatient treatment phase followed by extended outpatient therapy or participation in 12-step self-help groups, such as Narcotics Anonymous or Cocaine Anonymous (Mueller & Wyman, 1997).

According to the United Nations International Drug Control Program Discussion Paper on Investing in Drug Abuse Treatment (2003), the major patient characteristics associated with better outcome from substance abuse rehabilitation are low severity of dependence; few psychiatric symptoms at admission; motivation beyond the pre-contemplation stage of change; staying longer in treatment; reinforcement with financial incentives or vouchers for attendance and abstinence; having an individual counselor or therapist; specialized services for psychiatric, employment and family problems; medication to block drug craving and the effects of drugs and reduce psychiatric symptoms; participation in self-help groups such as Alcoholic Anonymous and Narcotics Anonymous; being employed or self supporting; and having family and social supports for sobriety. On the other hand, services such as alcohol/drug education sessions; general group therapy sessions, especially "confrontation" sessions; acupuncture sessions; and patient relaxation techniques have shown little indications of better or longer-lasting outcomes. However, "the absence of evidence" does not prove that a treatment is ineffective.

Several approaches have been found to be effective for substance abuse treatment - relapse prevention therapy, contingency management and use of coordinated behavioral, emotional and cognitive treatment approach. Each identified approach is considered a behavioral therapeutic approach which may include a broad range of approaches, such as,

cognitive therapy, behavioral therapy, psychotherapy, skills training, counseling, and other rehabilitative therapies. These are the most widespread forms of treatment currently available for substance abuse (NIDA, 2005).

However; the role of religion in drug abuse treatment has generated much public discussion in the wake of state government policy decisions to exempt “faith-based treatment” from standard state licensing requirements. Advocates argue that religion is a powerful aid to recovery from drug abuse, and cite research results from studies in support of their arguments (Richard, Bell & Carlson, 2000).

Faith-Based Substance Abuse Treatment

The benefits of supporting the faith community in providing services for both the prevention and treatment of substance abuse and dependence cannot be overestimated. SAMHSA has joined with both the Johnson Institute (JI) and the National Association for Children of Alcoholics (NACoA) to explore alternatives in which the faith community can address the problem of substance abuse and the harmful impact this disorder has on children and families. The organization also sought to identify ways in which the topic could be incorporated into the education and training of clergy – ministers, priests, rabbis, deacons, elders, and pastoral ministers, such as lay ministers, religious sisters, among others (National Association for Children of Alcoholics and the Johnson Institute, 2003).

The history of drug use is intertwined with spirituality and religion. Spirituality is defined as a relationship with God that fosters a sense of meaning, purpose, and mission in life. This relationship produces signs of altruism, love, or forgiveness that have a

discernible effect on an individual's relationship to self, nature and others (Carroll, 1997). Spirituality is not a religion but has to do with experience. Religion has to do with the conceptualization of that experience. Whereas spirituality focuses on what happens in the heart, religion tries to codify and capture that experience in a system. Spirituality can be viewed as an inner journey toward a relationship with a transcendent Being, and religion is associated with institutional expressions of spirituality (Frame & Williams, 1996).

Spirituality and religiosity may have different therapeutic benefits to people recovering from substance abuse. Spirituality contributes to a more optimistic life outlook whereas religious faith acts as a buffer to stress. However, even with these distinctions, the concept of spirituality and how it differs from religiosity remain vague (Plante, 2000).

Many clinicians and researchers have long believed that spirituality is an important aspect of a person's life when substance use and abuse are involved. Project MATCH (Matching Alcoholism Treatments To Client Heterogeneity), a multi-site clinical trial designed to test a series of a priori hypotheses on how patient-treatment interactions relate to outcome, in 1993, was one of the early scientific investigations of spirituality and substance abuse. Most recently, discussions and scientific research on this topic have become more common within the scientist-practitioner model of behavior (MacKinnon, 2004).

The faith-based community offers a vision of human life that acknowledges that people are the designer of the universe. They can grow in maturity, in freedom, be responsible for one another, and learn to understand and appreciate the wisdom and

beauty of the universe. According to their beliefs, God gives human beings freedom, but always seeks to guide them to a way of life in which that freedom will be used for good. God's orders are directions for finding fulfillment, as personal and moral agents, in understanding, sharing and appreciating the experiences and projects of others (Ward, 2000).

According to MacKinnon (2004), a large body of evidence indicates that spiritual people are generally healthy people. Spirituality has been related to less depression, higher levels of wellbeing, less teenage pregnancy, decreased cardiovascular disease, and higher overall global functioning. Alcohol Anonymous has since its beginnings acknowledged spirituality as one of the most vital aspects of obtaining and maintaining sobriety. It has as an element of its treatment approach a belief in a Higher Power. This Higher Power is not meant to be the equivalent of any religious denomination or one's notion of God, but rather is an internal, individual concept of a Spirit that is broad, all inclusive, and accessible to all who sincerely seek it.

Religion and spirituality can therefore be important companions to the treatment and recovery process. Many recovery substance abusers attribute their motivation to seek treatment and the ability to maintain sobriety to their religious beliefs and the support of a community of believers. These individuals are usually successful in recovery and commonly display greater levels of faith and spirituality than those who relapse (Califani, Jr. & Sheehan, 2002).

Gorsuch (1995), suggest that the religiously involved individuals are consistently less likely to use drugs, and when they do so are less likely to engage in heavy use and

suffer its adverse consequences. Drug abusers concept of God may be linked to the likelihood of continuous substance abuse. Individuals with a more wrathful, punitive conception of God may be at higher risk for developing problems with drugs. Those affiliated with religious groups that show an increase of substance use and abuse incidences would be expected to be at higher risk.

People in recovery often undergo life-altering transformation as a result of embracing a Higher Power. The result is often an intense spiritual journey that leads to recovery (Integrate spirituality, 1999).

The use of spiritual strategies in treatment sessions is gaining increased acceptance in substance abuse. People are learning new ways of thinking, feeling, and behaving to become healthier and develop less problematic life styles. Spirituality is an important way to access people and to communicate respect for them, their tradition, and their cultures. Substance abusers who are provided the opportunity, motivation, and encouragement to talk about loss of control and physical and psychological trauma via their prayers can increase hope and assurance that someone has the power to help them. They can begin to diminish their feelings of despair (Washington & Moxley, 2001).

As an expression of spirituality, prayer can be critical in helping substance abusers overcome despair and hopelessness. Prayer can be defined as an expression of the petitioner's relationship to a Higher Power. The cognitive processes stimulated by prayer can serve important roles in calming these individuals, orienting them to their situation, reducing anxiety, and redirecting their energy. These intra-personal resources are important in recovery, in facilitating healing (Washington & Moxley, 2001).

Research has shown that spirituality can positively affect how substance abusers organize their lives and cope with life stress that may have preventive value in areas such as cognitive stress inoculation and psychosocial competency building. People in recovery who express a greater degree of spirituality will demonstrate more positive self-appraisals, healthier coping styles, and more positive attitudes towards others, than will those who express a lesser degree of spirituality (Brome & Deaneen, 2000).

The literature that examines the impact of spirituality on recovery suggests that spirituality provides the substance abuser with knowledge that the recovery process requires a relationship with a Higher Power greater than the self. Substance abusing people, through continued drug use, learn that complete reliance on the self may not help them reach their goal of sobriety because of real temptations that may exist and/or past failures in the recovery process. This awareness often results in many substance abusers placing their faith in some source of spiritual energy or power outside of the self (Peteet, 1993).

Higher religious faith and spirituality are associated with increased coping, greater resilience to stress, an optimistic life orientation, greater perceived social support and lower levels of anxiety. People recovering from substance abuse tend to place great importance on prayer, belief in a God and a strong sense of faith. Recovering people tend to report high levels of religious faith and religious affiliation, but choose to rate themselves as being more spiritual than religious (Plante, 2000).

The U.S. Department of Health and Human Services (2004), indicated in the special featured publication, *Effective Prevention Partners: Community- and Faith-Based*

Programs, that 95 percent of Americans believe in God or a universal spirit. Adults who believe that religion is important and who attend religious services frequently are less likely to use alcohol and illicit drugs. Adults who never attend religious services are more than five times likelier to use illicit drugs other than marijuana and almost seven times likelier to binge drink. A large number of substance abusers report that their recovery is directly related to their religious beliefs and the social support of a community of believers.

In a study conducted by Desmond and Maddux (1981), 45 percent of heroin abusers, who were admitted to religion-focused substance abuse treatment, were abstinent for more than a year, compared to 5 percent of participants in a nonreligious public health service hospital treatment program. This was a nine-fold difference, indicating that drawing upon spiritual resources can make a difference in improving drug abuse treatment.

According to Richard, Bell and Carlson (2000), increased church attendance is a significant predictor of reduction in drug use and Twelve-Step group attendance is a significant predictor of reduction in drug use, independently of church attendance. Although individual religiosity failed to predict reduction in drug use, this study did not test the claim that increased individual religiosity, over a period of time, might be associated with reduction in drug use.

In 1987, the United States Drug Enforcement Administration identified Puerto Rico as the Caribbean epicenter of illicit cocaine and heroin trade between Latin America and the United States. A household-based survey of Puerto Rican adults found that 5.6

percent of the population was in need of substance abuse treatment and drug-related homicide rate was three times the U.S. average. In 2001, it was designated as a zone of high-intensity drug traffic. As of January 2003, Puerto Rico had an unemployment rate twice the U.S. median and much of the illicit drug trade, such as sex work, was related to economic pressures. The Puerto Rican legislature voted to define drug dependence as a spiritual and social problem, reflecting a high prevalence of faith-based programs for substance abuse treatment. Faith-based residential substance abuse treatment centers comprise over 75 percent of all state-registered drug treatment programs (Hansen, 2004).

The results of a survey conducted by Dermatis, Guschwan, Galanter and Blunt, (2004), of New York University Medical Center, of substance abusers in therapeutic community treatment, indicated that most of them would like spirituality to be featured in their treatment, and nearly half favored the incorporation of spirituality-based Twelve-Step programs. The surveyed substance abusers indicated that they had been in treatment a range of 1 to 72 months. Forty percent reported that they were attending religious services or spiritual meetings once per week or more and more than half (59 percent) reported that they “always” or “often” practiced some form of meditation or prayer. The majority (78 percent) said that they believed in a “Higher Power.” Fifty-four percent reported that they thought spirituality should be featured “a lot” or “very much,” another 20 percent reported that it should be featured “a fair amount” more and 11 percent felt that spirituality should not be featured more at all in treatment. On average, patients supported the incorporation of spirituality or a formal Twelve-Step approach into their treatment.

It is likely that spirituality has a major role in the onset, treatment, and recovery from substance abuse. However, there is still a lot to learn about spirituality and substance abuse, including whether spirituality leads to decreased substance abuse, whether substance abuse leads to lowered levels of spirituality, whether spirituality plays a differential role during the course of substance abuse versus during recovery, and the relationship between religion and spirituality. The fact that an effort to examine spirituality in the substance abuse field is on the rise is exciting news for researchers, clinicians, and patients and will hopefully provide the field with yet another piece of the substance abuse puzzle (MacKinnon, 2004).

Contingency Management Substance Abuse Treatment

One of the problems in treating substance abusers is getting them to stay in treatment long enough to work towards recovery. Positive reinforcement – in the form of vouchers – has been found to be an effective way to help substance abusers stay in treatment and work towards their recovery. Although a voucher system may cost more to operate, its effectiveness may save society money in the long run through reduced medical and criminal justice costs (Psychology Matters, 2006).

Contingency management (CM) interventions, also called motivational incentives, are based upon principles of behavior modification. These procedures stem from token economy approaches that were developed over 40 years ago and are utilized today. The behavioral principles consist of three basic tenets. First, the environment is arranged such that target behaviors are readily detected. Frequent monitoring is necessary for this

aspect. Second, tangible reinforcers are provided whenever the target behavior is demonstrated. An example may be that the patient receives a token, a clinic privilege, or a gift certificate whenever she or he tests negative for drugs. Third, when the target behavior does not occur, rewards are systematically withheld (Petry, 2002).

Substance abuse treatment is usually considered aversive. Society considers substance abusers to engage in illegal behaviors, and the courts and legal systems may mandate or coerce them into treatment, because many of the drugs they use are illegal. Rather than rewarding substance abusers for their progress and attempts at remaining abstinent, some treatment programs utilize confrontation techniques when patients are suspected of “using” or discharge patients when they are not adhering to program rules. While these negative techniques may be effective in altering some behaviors, they may also result in an unpleasant environment and context for recovery (Petry, 2002).

The CM approach is a means of altering the problem behavior of individuals. The fundamental objective is to alter an individual’s day-to-day behavior through the systematic application of reinforcement or punishment, contingent upon the performance of specified behavior. Timely delivery of the reinforcement and punishment is of paramount importance (Burdon, Rall, Prendergast & Rawson, 2001).

The greater time between the behavior and the delivery of consequence, the less effective the reinforcement or punishment will be. On the other hand, the delivery of a punishing event contingent upon the performance of a specific behavior will result in a decrease in the occurrence of that behavior (Burdon, Rall, Prendergast & Rawson, 2001).

CM is a strategy used in substance abuse treatment to encourage positive behavior change in patients by providing reinforcing consequences, when patients meet treatment objectives, and by withholding those consequences, or providing punitive measures, when objectives are not met. The reinforcing or punishing consequences may be contingent on objective evidence of recent illicit drug use or on another behavior important in the treatment process, such as compliance with a medication regimen or regular clinic attendance. CM procedures are implemented through written contracts that detail the desired behavior change, duration of intervention, frequency of monitoring and potential consequences of the patients success or failure in making the agreed upon behavior changes. Positive consequences may include receipt of vouchers that are exchangeable for retail goods, whereas negative consequences may include withholding of vouchers or an unfavorable report to a parole officer (Higgins and Petry, 1999).

CM procedures can be designed for an individual patient, they can be developed for use with specific populations, or they can be implemented clinic wide. An individualized CM approach can be designed for a patient who is having specific problems with drug use, or a patient who is failing to take the necessary steps to resolve her or his employment issues. Specific subpopulations within a clinic may be cocaine abusing opioid treatment patients. If a problem is clinic wide, such as lack of on-time attendance at group sessions, a procedure can be designed to address this issue among all patients (Petry, 2002).

CM procedures were developed primarily for the treatment of substance abuse disorders and related problems. Treatment providers usually rely on reinforcement as

oppose to punishment. The two primary reasons are that treatment providers are reluctant to punish behavior that is viewed as a manifestation of a disease and CM is usually performed in outpatient program settings. If patients are punished, they may stop attending treatment (Petry, 2002).

This approach has demonstrated efficacy in retaining substance abusers in treatment. It has also been found to promote drug abstinence and encourage appropriate behavior (Petry, Petrakis, Trevisan, Wiredu, et al, 2001).

CM was studied independently in an urban Baltimore program. According to Silverman, et al., (1994), positive results were found when tying the 12-week voucher reward system to cocaine drug testing. Nearly half of the cocaine-abusing patients, who were also heroin users, given vouchers for cocaine-free urine test results, were able to remain continuously abstinent for 7 to 12 weeks. Among patients receiving vouchers and not tied to urine test results, only one patient achieved abstinence for more than 2 weeks.

Almost 46 percent of the cocaine-dependent patients participating in a 12-week community reinforcement and contingency management program, at the University of Vermont, were able to remain continuously abstinent from illicit drugs through 2 months of treatment (Higgins, et al., 1991).

When the program was extended to 24 weeks, 42 percent of the participants were able to achieve 4 months of continuous abstinence. Patient retention was also high. Within the Vermont community reinforcement and contingency management group, 85 percent of the patients completed the 12-week program compared to only 42 percent of those in the Twelve-Step substance abuse counseling control group (Higgins et al, 1993).

Two studies were conducted to explore the effectiveness of contingency management techniques in promoting punctual counseling attendance among opioid treatment patients. The initial study had fifty participants that were recruited from an inner-city opioid treatment program. One time attendance was reinforced during the intervention phase with a voucher that was redeemable for a draw out of a box containing 100 tokens with various values. The opioid treatment patients, who exhibited poor attendance, during baseline, showed a significant positive response during the contingency management intervention phase. The second study used the same design except that the fifty-two participants were randomly selected and placed into reinforcement groups that received either the variable rate of reinforcement, as in the initial study, or a fixed value re-enforcer of \$3.25. The results were similar in that poor counseling attendance significantly improved during the intervention. The overall results indicated that targeting poor attendance, early in treatment may be especially important for improving treatment outcome (Rhodes, Saules, Helmus, Roll, et al., 2003).

The results of a randomized clinical trial conducted with twenty pregnant, opiate-abusing women, who received either standard treatment (opioid treatment, weekly group, counseling, and urine drug screenings three times per week), or enhanced standard treatment (standard treatment plus weekly prenatal care, weekly relapse prevention groups, contingency awards for drug abstinence, and child care during treatment visits), were published in 1995, by Carroll, Chang, Behr and Clinton. Although the comprehensive program was not associated with better substance use outcomes, it was associated with longer gestations and infants with higher birth weights.

According to Silverman, Higgins, Brooner, Montoyo, Cone, Schuster & Preston (1996), the strongest efficacy evidence for existing behavioral therapies for substance use is for contingency management techniques, derived from behavioral therapy and the principles of operant conditioning discovered by B. F. Skinner.

The introduction of contingency management techniques, in opioid treatment clinics, repeatedly has been found to reduce the use of other drugs. However; a limitation of contingency management is that the behavior change does not continue when the reward system is withdrawn (Childress, McLellan & O'Brian, 1985).

In the operation of a typical opioid treatment program, take-home privileges are reserved for patients who have been drug free for a prolonged period of time, employed, disabled or in school. Take-home doses are used as reinforcers to promote behavior change in patients, who would not typically be awarded take-home privileges because of their ongoing drug use. The contingency take-home procedure can also be used to promote abstinence from other supplemental drugs that patients use during treatment (Strain & Stroller, 1999).

According to the Center for Disease Control (CDC)(2002), opioid treatment has important benefits for affected individuals and for society. Those benefits include decreased or stopped use of injection drugs; reduced risk of overdose or acquiring or transmitting diseases; reduced mortality; possible reduction in sexual risk behaviors; decreased criminal activity; improved family relationships; employment potential; and improved pregnancy outcomes.

Opioid treatment is the most highly regulated of all substance abuse treatments. Opioid treatment regulations have varied over time, across countries, and among localities. The governmental bodies and agencies involved in its regulation are numerous. In the United States, opioid treatment is regulated at local, state, and federal levels (Strain & Stroller, 1999).

Researchers David H. Epstein and colleagues, from NIDA, Florida Atlantic University and Sinai Hospital in Baltimore, studied a substance abuse treatment combining cognitive-behavioral therapy (CBT) with contingency management (CM), in a sample of patients consecutively admitted for opioid treatment, at the Archway Clinic. The Archway Clinic is the treatment research program of the National Institute on Drug Abuse Intramural Research Program in Baltimore. There were four resulting groups that consisted of 49 subjects in a control condition, without active treatment; 47 CM only; 48 CBT only; and 49 a combination of CBT plus CM. Researchers found that the CM intervention had robust effects on all cocaine-related outcome measures, during the intervention phase of the study. CBT showed no substantial effects on any of the cocaine-related outcome measures and it appeared to reduce the effect of CM, in the combination, group during the first seven weeks of the intervention phase (Higgins, Wong, Badger, et al., 2000).

CM procedures are effective in reducing use of a variety of drugs. In a study with cocaine abusing outpatients, 55 percent of those who received behavior therapy plus vouchers for submitting urine samples negative for cocaine achieved at least 2 months of continuous cocaine abstinence. Only 15 percent of those who received the same behavior

therapy, without the vouchers, maintained this period of abstinence (Higgins, et al., 1994).

Most substance abuse treatment programs strongly endorse abstinence from all drugs of abuse, and clinicians' initial instincts are to reward patients only when they demonstrate complete abstinence. A review of CM studies finds that beneficial effects of the interventions are less likely to be achieved when patients are required to be abstinent from multiple substances to earn rewards. Patients may not be motivated or able to achieve complete abstinence during the early phase of treatment. Targeting a single drug at a time is a better strategy. This in turn may promote further motivation to abstain from the primary, as well as secondary drug(s). Most CM studies that target abstinence from a single drug also find reductions in other drugs (Griffiths, et al., 2000).

Since the early 1990's, Dr. Higgins research has shown continuously that vouchers are highly effective in reducing substance use and retaining patients in treatment programs. A 2003 research review examining the effectiveness of voucher-based interventions for cocaine abuse indicated that in 15 of the 16 studies examined, significant increases in cocaine abstinence were observed. Much of Higgins' research involved substance abusers in the rural State of Vermont. However, research by Kenneth Silverman, Ph.D., of Johns Hopkins University and colleagues showed that a voucher-based program also works for inner-city cocaine abusers. Additional research by psychologist Nancy Petry, Ph.D. and colleagues, at the University of Connecticut, has found that a lower-cost reward system, using prizes, works in retention and treatment of

drug abusers, and may be attractive to community-based substance abuse treatment programs that cannot afford using the vouchers (Psychology Matters, 2006).

Given the importance of counseling attendance in enhancing the effectiveness of opioid treatment and the demonstrated efficacy of CM interventions in substance abuse treatment, two studies were designed to evaluate the efficacy of relatively low-cost CM interventions to promote increased counseling attendance among an inner-city opioid treatment population. On-time attendance, drug abstinence and treatment retention were also evaluated. The results of study one indicated that overall, participants attended sixty-six percent of appointments on time during the baseline phase. Results also demonstrated the effectiveness of CM techniques in promoting punctual counseling attendance among those with a history of poor compliance with program expectations for counseling attendance. Study two was conducted in the same clinic one year later. CM was again effective in promoting on-time counseling attendance among opioid treatment patients with a history of poor counseling attendance (Rhodes, et al., 2003).

In a study conducted by Stanton, et al. (1982), it was demonstrated that payment for attendance improves treatment retention and the attendance of family members at sessions. The families participating in the study were low income and working class families with sons enrolled in a Veterans Administration opioid treatment program. Patients were opiate dependent for at least two years and in regular contact with parents or parent surrogates. The mean age of patients was 25.3 and 25 percent were married. Remarkably high rates of treatment compliance were achieved, once families were engaged in treatment. Each family was randomly assigned to one of the three treatment

conditions: Paid Family Therapy, Paid Family Movies and Unpaid Family Therapy. Ten sessions were scheduled and in the paid groups every family member age twelve or over received five dollars at each session attended. In the paid family therapy group, all families attended a minimum of four sessions. Eighty-one percent attended ten or more sessions as specified in the initial treatment contract.

It is frequently reported that a large percentage of patients entering substance abuse treatment never respond to the treatment. However, CM techniques have been successful in improving treatment-related behaviors in this population. The two studies suggested that targeting those with poor counseling attendance early in treatment may be especially important in light of the consistent finding that poor counseling attendance is likely to result in high rates of drug-positive urine screens, high attrition and poorer rate of employment (Rhodes, et al, 2003).

Theoretical Frameworks

Two theoretical frameworks have been chosen to further explain the treatment approaches for this research project. The first framework is the Existential Perspective. This is a philosophical outlook, centered in Europe, with roots in the work of Martin Heidegger and Soren Kierkegaard. The emphasis is on the uniqueness of the individual, the quest for values and meanings, and the existence of freedom for self-direction and self-fulfillment. The second framework is the Behaviorist Perspective, which began with the philosophical base of John Locke, followed by the discovery of the conditional reflex

by Russian physiologist Ivan Pavlo (classical conditioning). Pavlo's work was followed by John B. Watson, E. L. Thorndike and B. F. Skinner.

Existential Perspective

The Existential Perspective was chosen as one of the theoretical frameworks for this study because it allows the researcher to address the breakdown of traditional faith, the alienation and depersonalization of individuals and the lack of meaning in individual's lives. The Existential Perspective view's people as having a high degree of freedom with the capacity of doing something about their predicament and being responsible for doing their best. In the face of life's inevitable hardships, such as loss and death, one can embrace the anxieties associated with uncertainty and make sense out of chaos and confusion (Carson & Butcher, 1992).

Existentialism is based on several premises, understanding that a "whole person" is more than the sum of his/her parts; understanding that people have many levels of self awareness, that can be neither ignored nor put into an abstract context; understanding people by examining their interpersonal relationships; understanding that people have free will and are participants, rather than observers of their own lives; and understanding that people's lives have purpose, values and meaning (Spear, 2001).

The basic tenets of the Existential Perspective are our existence is a given, but what we make of it is up to us; our choices reflect the values on which we base and order our lives and our essence is created by our choices. Each of us must find our own pattern of values; however, the values that give one's life meaning may be quite different from

those that provide meaning for another; and by living a life that counts for something, we can overcome our existential anxiety and deny victory to nothingness – living in such a way that nothing will be an unjust fate (Carson & Butcher, 1992).

One of the central themes of the existential perspective is the anxiety that surrounds death. An important aspect of personal growth and development is coming to terms with one's own mortality (Vandenberg, 1991).

Death brings about loss of life, relationships and a sense of the future. The fear of death is paralyzing to people who avoid it, while acceptance of its inevitability can free them (Krueger & Hanna, 1997).

However, one cannot conceive of freedom without responsibility, not only for self, but everyone. This gravity of responsibility makes room for anguish and despair in the person's existence. The tendency then is to avoid this sense of responsibility (Sartre Online, 2002).

Such is the condition of substance abusing people. As the disease progresses and the biological need to use takes over, the loss of spirituality becomes more pronounced. These individuals are not only physically controlled by substances, they risk experiencing a permanent separation between themselves and their ability to love, trust, mature and act responsibly in the role of a valuable contributor to society (DiLorenzo, Johnson & Bussey, 2001).

Each person is responsible for what he/she is. Freedom in an existential context demands that each person assumes responsibility for his/her choices and act upon those choices (Yolom, 1980).

Assuming responsibility can be a daunting task for substance abusing people; however, their uniqueness is manifested in the choices they make. When these individuals choose to act against their own chosen values and awareness, guilt often manifests. Existential guilt is when people have chosen to transgress against their own being or destiny (Yolom, 1980).

Much like the existential perspective, the notion of spirituality involves a complexity of feelings, thoughts and attitudes about people and how they relate to the world. Strong spiritual or religious beliefs can work to regulate a person's sense of self-esteem, in a healthy manner. Substance abusing people struggle to meet the responsibility of everyday life. They live in a state of chronic apartness, separated from God and from the people who love them (Alexander, 1997).

Struggling to develop and live in a relationship is part of the human experience. In their attempt to understand the existential anxiety that stems from isolation, substance abusers are drawn to realizing their connection with others. When confronted by uncertainty, these individuals seek attachment with others as a strategy for coping (Vandenberg, 1991).

This notion of separation and fusion is a constant then in the person's development toward self-awareness. This leads the substance abusing person to build his/her life choices around opportunities for attachment or perhaps around means of avoiding rejection or abandonment (Krueger & Hanna, 1997).

A faith-based substance abuse treatment approach stresses that true unity is inward and spiritual personhood is essentially social and requires living in a community

in which spiritual growth takes place. People come together to help each other grow in spiritual and moral beliefs (Ward, 2000).

Subsequently, affiliate behavior begins to become exploitive and the substance-abusing person becomes aware of commitments, responsibilities, and loved ones. It is in relationship to these same commitments, responsibilities, and loved ones that the spiritual being is established. When people experience themselves in positive relations to these objects, they experience a positive sense of self. When the relationships to these objects are negative, the experience of the spiritual being becomes negative also (DiLorenzo, Johnson & Bussey, 2001).

Behaviorist Perspective

This Perspective allows the researcher to address the issue of learning to overcome specific behavior problems as adopted by the Contingency Management Approach. According to Carson and Butcher (1992), in this perspective it is believed that abnormal behavior is a direct result of defective learning and that reinforcement and imitation teaches normal behavior. The behaviorist believes that patterns are developed and established through repeated association with positive reinforcers. This repeated association of an established behavior pattern with aversive stimuli results in avoidance behavior. It is believed that behaviors are learned and that we are products of our environment. The focus is on present and overt behavior.

Behaviorists believe that behaviorist theory could be used to infer a learning history. They believed that one could take an animal or person, observe its/his/her

behavior, and figure out what had been reinforced previously. Behaviorist reduces all responses to a pattern of positive and negative reinforcement that establishes links between stimuli and their environmental antecedents and consequences. The reinforced responses are repeated and those that are punished are not (Skinner, 2003).

The act of learning is inconsistent in nature and it can at times appear to be a very simple act. It is so simple that substance abusers do not question its presence in how they go about their daily activities, for it is natural to their existence as learning organisms. Yet, when they encounter difficulties, they no longer take the learning process for granted (Forrester & Jantzie, 2004).

Unlike cognitive-behavioral, the behaviorist perspective assumes that the only things that are real are the things we can see and observe. It is not possible to see the mind, the id, or the unconscious as stated in psychoanalyst theory, however; it is possible to see how people act, react and behave. The focus is on what the substance abusers do not what they think or feel. The behaviorist perspective does not consider the mind or the brain to understand the causes of abnormal behavior; it assumes that the behavior represents certain learned habits and attempts to determine how they are learned (Bustamante, Howe-Tennant & Ramo, 1996).

J. B. Watson, the father of Behaviorism, introduced the term behaviorism and was a vocal advocate in the early part of the 20th century. He called for the use of scientific objectivity and proposed a law of frequency that stressed the importance of repetition. He stated that the more frequent a stimulus and response to occur in association with each other, the stronger that habit will become (Rutledge, 2004).

Edward Thorndike believed that the law of effect could explain all of human behavior in terms of the development of mutually supporting stimulus response association. He maintained that, in combination with the law of exercise associations are strengthened by use and weakened with disuse (Kentridge, 2004).

B. F. Skinner expanded on the foundation established by Watson and Thorndike and focused on operant conditioning. Skinner believed that voluntary or automatic behavior is either strengthened or weakened by the immediate presence of a reward or a punishment. The learning principle behind operant conditioning is that new learning occurs as a result of positive reinforcement – old patterns are abandoned as a result of negative reinforcement (Belkin & Gray, 1977).

Skinner also believed that the process of contingencies and reinforcement could be helpful with learning complexities. This occurs through successive stages in the shaping process and the contingencies of reinforcement being changed progressively in the direction of the required behavior (Skinner, 1968).

According to Grabowski, Stitzer and Henningfield (1984), positive reinforcement is a reward procedure. One of the therapeutic goals of the operant approach is to develop and implement positively reinforcing procedures for encouraging and promoting desired behavior change. The implementation of positive reinforcement procedures can have a desirable effect upon the therapeutic and social atmosphere of a treatment program. The procedures can reduce threats and manipulation that can occur between staff and patients, while providing a context within which patients can succeed in achieving goals. Patients

will be positively reinforced for their achievements rather than facing threats and punishment for failure to make the desired therapeutic progress.

In summary, this chapter was a review of the history of substance abuse treatment to include funding of substance abuse programs, outcome studies as they relate to illicit drug use, family relationships and employment of substance abusers, an overview of substance abuse treatment, with special focus on the two substance abuse treatment approaches and two theoretical frameworks utilized in the study. The literature review was presented to acquaint the reader with an overview of the subject matter and provide a scholarly foundation to the study. Understanding the effectiveness of substance abuse treatment approaches is essential to social service providers who are responsible for referring individuals for substance abuse treatment. Selecting the most appropriate care for those individuals, in need of substance abuse treatment, is critical to the outcome of each treatment approach.

The literature supports the fact that substance abuse treatment is necessary and confirms the need for more comparative research regarding the effectiveness of a variety of treatment approaches. Moreover, it clearly indicates that substance abuse treatment is effective. However there is a call for treatment providers to become more responsive and bridge the gap between what is needed by the individual substance abuser and what treatment approach will be most effective.

CHAPTER III

METHODOLOGY

This chapter presents an exploratory description of the relationship between the three dependent variables and two independent variables. The dependent variables were illicit drug use, family relationships and employment. The independent variables were faith-based substance abuse treatment and contingency management substance abuse treatment. This chapter describes the research design, description of the sites, sample and population, instrumentation, treatment of data and limitations of study.

Research Design

The research design for this study was explanatory and descriptive. This design was utilized to compare the differences between two or more quantifiable variables. These included the dependent variables and the independent variables.

Description of the Sites

The sites for this study were both located in the Atlanta, Georgia Metropolitan area, including Fulton and Dekalb Counties. The faith-based substance abuse treatment program was Atlanta Union Mission. The contingency management substance abuse treatment program was Alliance Recovery Center.

The Atlanta Union Mission is a Christian ministry, located in Atlanta, Georgia. The ministry was originally established, during the depression, in 1938, as a shelter for the homeless. The ministry has expanded to include services for addicted men, women, and women children. The Atlanta Union Mission is committed to bringing Christ's healing power to any person in crisis through programs of rescue and recovery. The organization houses as many as 1,070 homeless and addicted men, women, and women children daily through emergency services, residential recovery programs and transitional housing. The Atlanta Union Mission provides residential recovery and transition housing to as many as 720 men, women and women children. The residential recovery program offers a 6 to 12 month Christian curriculum with individual and group counseling, life skills training, work therapy and spiritual guidance.

Alliance Recovery Center is an Opioid Treatment Program, located in Decatur, Georgia. The program was established in 1996. It was the first Opioid Treatment Program, in the State of Georgia, to receive a national accreditation. The program is accredited by the Commission on Accreditation of Rehabilitation Facilities (CARF) and provides outpatient Opioid treatment to approximately 275 patients annually. Patients receive pharmacotherapy, employment support, family education, individual and group counseling, to include 12 Step group work, life skills training and take home medication, as a reward for compliance.

The two sites were chosen because of the number of substance abusers participating in the treatment programs continuously. Information regarding the

population served and services offered, at each program, was gathered through collaborative relationships with substance abuse treatment providers.

Sample and Population

The sample population consisted of 149 substance abuse treatment patients. The population was comprised of both males and females. They were all currently receiving treatment from one of the selected programs. Each participant had been in substance abuse treatment for three months or more.

Instrumentation

The survey is the instrument of choice utilized in this study. The survey was useful in this instance, as the researcher collected data that could not be directly observed. Additional advantages of using a survey were economic benefits, rapid turnaround in data collection and its ability to identify certain attributes of a population from a small group of individuals.

The survey instrument consisted of a total of seventeen questions. Questions 1 through 5 provided demographic information on the survey participants, which included gender, age group, ethnicity, education and marital status. These questions were vital to the integrity of the study.

Questions 6 and 7 provided information on participants' employment status and annual income. Questions 8 through 10 provided information on participants' illicit drug of choice, current illicit drug use and time in substance abuse treatment. Question 11 was

designed to gather data regarding treatment program provision of family education and family therapy.

Questions 12 through 17 consisted of a four point Likert continuum scale. The scale was as follows: 1 = Strongly Disagree, 2 = Disagree, 3 = Strongly Agree and 4 = Agree. These questions were designed to measure the extent to which treatment at either the faith-based substance abuse treatment program or the contingency management treatment program impacted the outcome of the three dependent variables, illicit drug use, family relationships and employment.

Treatment of Data

The statistical treatment of the data was descriptive, which included measures of central tendency, frequency distribution, cross tabulations and chi-square. Descriptive statistics were utilized to organize and analyze data collected from the survey questionnaire.

Frequency distributions were utilized on selected variables of the study in order to summarize the basic measurements of the study. Additionally, they were used to present demographic information of the participants.

Two test statistics were employed. The first test was phi (Φ), which is a symmetric measure of association that is used to demonstrate the strength of relationship between two or more variables. The following are the values associated with phi (Φ):

.00 to .24	“no relationship”
.25 to .49	“weak relationship”

.50 to .74 “moderate relationship”

.75 to 1.00 “strong relationship

The second test statistics employed in the research study was chi-square. Chi-square was utilized as the test of significance of the relationship between the dependent and independent variables at the .05 level of probability. Chi-square was also the inferential statistical test that was used to determine if there was a statistical difference between the outcome of faith-based substance abuse treatment effect on participants illicit drug use, family relationships and employment and contingency management substance abuse treatment effect on participants' illicit drug use, family relationships and employment. Data were analyzed utilizing the Statistical Package for the Social Sciences (SPSS).

The investigator drafted a letter to the clinical director of each facility in an effort to gain their support. Two weeks prior to beginning the study, the investigator visited each facility to explain the procedures and confidentiality. The clinical directors disseminated the survey to each participating group, and provided oversight for the entire data collection process.

Limitations of Study

There were basically two limitations of the study. Many of the survey participants indicated that family education or therapy was provided at their treatment programs; however, the study did not indicate to what extent the women, who were AFDC recipients were being prepared for reunification with family members and children.

Although the study indicated that a substantial number of respondents were employed, it did not determine if program participants were paying for their treatment services or receiving assistance from another source.

CHAPTER IV

PRESENTATION OF FINDINGS

The purpose of this chapter was to present the findings of the study in order to describe and analyze illicit drug use, family relationships and employment among participants in faith-based and contingency management treatment programs. The findings are organized in three sections: demographic data, analysis of dependent and independent variables and research questions and hypotheses.

Demographic Data

This section provides a profile of the study respondents. Descriptive statistics were utilized to analyze the following: gender, age group, ethnicity, education, marital status, annual income, employment status, whether respondent still use illicit drugs, drugs respondents are being treated for, time in treatment and treatment program provision for family support or therapy.

A targeted population for the research was composed of substance abuse treatment participants at Atlanta Union Mission, a faith-based substance abuse treatment program and Alliance Recovery Center, a contingency management substance abuse treatment program. One hundred and forty-nine program participants were randomly selected using convenience sampling from among participants of the selected sites.

Demographic Data

Table 1 is a demographic profile of the respondents. It provides a graphic picture of the respondents' primary characteristics.

Table 1

Demographics of Study Respondents

Variable	Frequency	Percent	Cum%
Gender			
Female	55	36.9	36.9
Male	94	63.1	100.0
Age Group			
Under 20	1	.7	.7
20-29	21	14.1	14.8
30-39	35	23.5	38.3
40-49	55	36.9	75.2
50-59	31	20.8	96.0
60 up	6	4.0	100.0
Ethnicity			
African American	73	49.0	49.0
Caucasian	66	44.3	93.3
Hispanic	3	2.0	95.3
Asian	1	.7	96.0
Native American	3	2.0	98.0
Other	3	2.0	100.0
Education			
Elementary	3	2.0	2.0
Junior High	11	7.4	9.4
High School Grad	47	31.5	40.9
Vocational	14	9.4	50.3

Table 1 (continued)

Variable	Frequency	Percent	Cum%
Some College	45	30.2	80.5
College Grad	29	19.5	100.0
Marital Status			
Married	46	30.9	30.9
Never Married	53	35.6	66.4
Divorced	39	26.2	92.6
Widowed	11	7.4	100.0
Annual Income			
Under \$10,000	51	35.7	35.7
\$10,000-13,999	16	11.2	46.9
\$14,000-17,999	11	7.7	54.5
\$18,000-21,999	17	11.9	66.4
\$22,000-25,999	9	6.3	72.7
\$26,000-29,999	9	6.0	79.0
\$30,000 up	30	21.0	100.0
Employment Status			
Unemployed	64	43.0	43.0
Full-time	64	43.0	85.9
Part-time	21	14.1	100.0
Still Using Drugs			
No	130	87.2	87.2
Yes	19	12.8	100.0
Drugs Being Treated For			
Alcohol	8	5.4	5.4
Marijuana	1	.7	6.1
Cocaine-Crack	21	14.2	20.3
Heroin	34	23.0	43.2
Methamphetamine	1	.7	43.9
Opiates	26	17.6	61.5
Multiple Substances	57	38.5	100.0

Table 1 (continued)

Variable	Frequency	Percent	Cum%
Time in Treatment			
1-6 months	58	38.9	38.9
7-12 months	23	15.4	54.4
13-18 months	9	6.0	60.4
19-24 months	6	4.0	64.4
More than 2 years	52	34.9	99.3
Missing	1	.7	100.0
Treatment Program Provide Family Support or Therapy			
No	30	20.1	20.1
Yes	119	79.9%	100.0

As shown in Table 1, the typical respondent was male, between the ages of 20-49 years of age. He was African American with either some college education or a college graduate and had personal experience of a marital relationship. He was employed either full-time or part-time with an annual income of \$18,000 or less. He was no longer using illicit drugs and his primary drug of choice was heroin, even though he abused additional illicit drugs as well. He has been in treatment 1-6 months and his treatment program provides family support or therapy.

Table 1 further reveals that females were few in numbers and only scored 55 with a percentage of 36.9%. The literature supports the response of women. In general, more men than women use drugs or women face more barriers in their access to treatment. Women seeking treatment are younger, with fewer resources, have dependent children

and often live with a drug-using partner. They are likely to have experienced trauma, and have higher rates of concurrent psychiatric disorders. They are usually the primary care providers in the family (United Nations, 2004).

Table 1 also pointed out that African Americans and Caucasians comprise of 93.3% (139) compared to Hispanics 2.0% (3), Asians .7% (1) and Native Americans 2.0% (3). According to the Center for Substance Abuse Treatment (1999), underutilization of services and failure of substance abuse treatment programs can be attributed to lack of bilingual or bicultural personnel qualified to address the unique social, cultural and linguistic life experiences of Hispanics. Native American treatment programs require personnel who understand the different value systems of the American Indian and the non-American Indian or Western world. Staff members should be recruited from the Native American communities. Community members, such as tribal healers, elders, and holy persons should serve as counselors and support staff. Only a small number of trained treatment professionals have acquired cultural competence through program models that are a blend of Western approaches and Eastern or Polynesian cultural ideology and background. Many substance abuse treatment providers received their education and experience primarily with Western-oriented universities and organizations.

There is a clear indication that drug treatment works. An extremely high number of respondents indicated "no" with regard to still using illicit drugs. One hundred-thirty or 87.2% respondents are no longer using drugs. Nineteen or 12.8% chose "yes" and despite treatment, they continue to use illicit drugs. Results indicate more than a third (57

or 38.5%) of the respondents used multiple substances prior to entering treatment.

Heroin and opiates were the primary drugs of choice for 60 or 40.6% of respondents and 21 or 14.2% identified cocaine or crack as the primary drug of choice. Only a small percentage indicated that alcohol (8 or 5.4%), marijuana (1 or .7%) or methamphetamine (1 or .7%) as the primary drug of choice.

Patients who stay in treatment three months or longer usually have better outcomes than those who stay in treatment for less time. In general, better outcomes are received when treatment is provided frequently and tailored to the individual needs. The ultimate goal of substance abuse treatment is to enable the patient to achieve lasting abstinence, but the immediate goals are to reduce drug use, improve the patient's ability to function, and minimize the medical and social complications of drug abuse (NIDA InfoFacts, 2005).

The majority of respondents (58 or 38.9%) indicated being in treatment for 1-6 months, 52 or 34.9% were in treatment for more than 2 years and 23 or 15.4 percent were in treatment from 7-12 months. These data corresponds with the number of respondents indicating that they no longer use illicit drugs (130 or 87.2%).

Substance abuse is a chronic disease. Because relapse and return to treatment are common features of a substance abusers path to recovery, treatment may need to extend over a long period of time and across multiple episodes of care (National Institute on Drug Abuse, 2006).

The majority of respondents (119 or 79.9%) indicated that family education and therapy support were provided at their treatment program. The U.S. Department of

Health and Human Services (2004) indicates that family education and therapy works to shift power to the parental figures in a family and to improve communication. The two approaches also keep substance abuse from moving from one generation to another. Studies have shown that if one person in a family abuses alcohol or drugs, the remaining family members are at increased risk of developing substance problems.

Illicit Drug Use

Abstinence from illicit drug use is the ultimate goal of all substance abuse treatments. However, the immediate goals are to reduce drug use, improve patients' ability to function and minimize the medical and social complications of drug abuse (Drugs and Substance Abuse, 2004).

Table 2

My treatment program has helped me stop using illicit drugs

Variable	Frequency	Percent
Strongly Disagree	6	4.0
Disagree	10	6.7
Strongly Agree	65	43.6
Agree	68	45.6
Total	149	100.0

Mean 2.89

Std. Deviation .311

Table 2 is a frequency distribution of the extent to which respondents indicated that their treatment program helped them stop using illicit drugs. Table 2 indicates whether the respondents strongly disagree, disagree, strongly agree or agree that their treatment program helped them stop using illicit drugs.

As shown in Table 2, the majority of treatment participants indicated that their treatment program helped them to stop using illicit drugs. Of the 149 surveyed, 10.7% stated that their treatment program did not help them stop using illicit drugs and 89.3% stated that their treatment program did help them stop using illicit drugs. The data indicated that treatment participants are receiving positive results from the services provided at their treatment program to help them stop using illicit drugs.

Table 3

I use illicit drugs occasionally

Variable	Frequency	Percent
Strongly Disagree	63	42.9
Disagree	56	38.1
Strongly Agree	4	2.7
Agree	24	16.3
Total	147	100.0

Mean 2.19

Std. Deviation .394

Table 3 is a frequency distribution of the extent to which respondents indicated that they continue to use illicit drugs occasionally. Table 3 indicates whether respondents strongly disagree, disagree, strongly agree or agree that they use illicit drugs occasionally.

As shown in Table 3, the majority of treatment participants did not use illicit drugs occasionally. Of the 147 respondents, 79.9% indicated that they did not use illicit drugs occasionally and 18.8% agreed that they were using illicit drugs occasionally. These data indicated that although many of the treatment participants have been able to sustain from the use of illicit drugs, a substantial number continues to struggle with not using illicit drugs.

Family Relationships

Substance abusers often find themselves increasingly isolated from their families. They usually prefer associating with others who abuse substances or participate in some other form of antisocial activity (U.S. Department of Health and Human Services, 2004).

Table 4

I did not get along with my family when using illicit drugs

Variable	Frequency	Percent
Strongly Disagree	20	13.5
Disagree	23	15.5
Strongly Agree	46	31.1
Agree	58	39.2
Total	147	100.0

Mean 2.75 Std. Deviation .689

Table 4 is a frequency distribution of the extent to which respondents did not get along with family members while using illicit drugs. Table 4 states whether respondents strongly disagree, disagree, strongly agree or agree that they did not get along with family when using illicit drugs.

As shown in Table 4, the majority of program participants did not get along with family when using illicit drugs. Of the 147 surveyed, 70.3% stated that they did not get along with family members when they were using illicit drugs and 29.0% stated that they did get along with family members despite their illicit drug use. These data indicated that some program participants were able to maintain relationships with family members regardless of their illicit drug use.

Table 5

My family members are supportive of my recovery

Variable	Frequency	Percent
Strongly Disagree	8	5.4
Disagree	8	5.4
Strongly Agree	76	51.4
Agree	56	37.8
Total	148	100.0
Mean 2.89	Std. Deviation .312	

Table 5 is a frequency distribution of the extent to which respondents' family members were supportive of their recovery. Table 4 indicates whether respondents strongly disagree, disagree, strongly agree or agree that their family members were supportive of their recovery.

As shown in Table 5, the majority of treatment participants were receiving support from family members during their recovery. Of the 148 survey respondents, 10.8% indicated that family members were not supportive of their recovery and 89.2% indicated that family members were supportive. These data indicated that family members support their loved ones during the recovery process.

Employment

Most people with drug abuse problems have difficulty with obtaining and retaining paid employment. Unemployed substance abusers are more likely to drop out of treatment prematurely and start doing drugs again (United Nations, 2002).

Table 6

I had employment problems because of my drug use

Variable	Frequency	Percent
Strongly Disagree	19	12.8
Disagree	19	12.8
Strongly Agree	47	31.8
Agree	63	42.6
Total	148	100.0

Mean 2.74 Std. Deviation .438

Table 6 is a frequency distribution of the extent to which respondents' had employment problems because of their illicit drug use. Table 6 indicates whether respondents strongly disagree, disagree, strongly agree or agree that they had employment problems because of their illicit drug use.

As shown in Table 6, the majority of program participants had employment problems prior to participating in treatment. Of the 148 participants who responded to the survey statement, 25.6% indicated that they did not have employment problems prior

to treatment and 74.4% indicated that they did have problems with employment prior to treatment. These data indicated that substance abuse has a negative effect on obtaining and maintaining employment.

Table 7

My treatment program has helped me maintain employment

Variable	Frequency	Percent
Strongly Disagree	9	6.8
Disagree	20	15.0
Strongly Agree	44	33.1
Agree	60	45.1
Total	133	100.0

Mean 2.78 Std. Deviation .414

Table 7 is a frequency distribution of the extent to which respondents' treatment program helped them maintain employment. Table 7 indicates whether respondents strongly disagree, disagree, strongly agree or agree that their treatment program helped them maintain employment.

As shown in Table 7, the majority of treatment participants who responded to the survey statement were helped to maintain employment by their treatment providers. Of the 133 program participants who responded to the survey statement, 21.8% stated that

their treatment program did not help them maintain employment and 78.2% stated that their treatment program did help them maintain employment. These data indicated that substance abuse treatment is effective in helping program participants maintain employment.

Research Questions and Hypotheses

There were three research questions and three null hypotheses in the study. This section provides an analysis of the research questions and a testing of the null hypotheses. This section also includes an analysis of the relationship between the dependent variable: (1) illicit drug use, (2) family relationship and (3) employment, with the dependent variables: (1) faith-based substance abuse treatment and (2) contingency management substance abuse treatment.

Frequency distributions were employed to explain the dependent and independent variables. Further, phi (Φ) was used to test the strength of the association between the two independent variables and chi-square was utilized to test the statistically significant relationships between the two independent variables.

Research Question 1: Is there a difference in the outcome of faith-based substance abuse treatment participants' continuous illicit drug use and contingency management substance abuse treatment participants' continuous illicit drug use?

Hypothesis1: There is no statistically significant difference between the outcome of faith-based substance abuse treatment participants' continuous illicit drug use and contingency management substance abuse participants' continuous illicit drug use.

Illicit drug use among faith-based and contingency management program participants

Science has made great progress over the past several years, but still has not been able to account fully for the physiological and psychological processes that transform controlled, voluntary "use" of alcohol and/or other drugs into uncontrolled, involuntary "dependence" on those substances, and there is still no cure. What can be done is to treat the "use" effectively and provide an acceptable return on participants' investment in treatment (United Nation, 2003).

In the study, illicit drug use was described as a treatable disorder. However, treatment must be tailored to the individual needs. Like people with diabetes or heart disease, people in substance abuse treatment learn behavioral changes and often take medications as part of their treatment regimen.

Most substance abuse programs strongly endorse abstinence from all drugs of abuse, and the initial instinct is to reward patients only when they demonstrate complete abstinence. However, a review of contingency management studies have found that beneficial effects of the interventions are less likely to be achieved if patients are required to be abstinent from multiple substances to earn rewards. Patients may not be motivated or able to achieve complete abstinence early in treatment. Targeting a single drug at a

time has been found to be a better strategy because patients may achieve initial has shown that most contingency management studies that target abstinence from just a single drug find reduction in other drugs as well (Petry, 2002).

Treatment Programs in Study

The Atlanta Union Mission was the faith-based substance abuse treatment program used in this study. Alliance Recovery Center was the contingency management substance abuse treatment program used in this study.

Table 8 is a frequency distribution of the number of respondents from each substance abuse treatment program. A total of 69 patients were receiving treatment at Atlanta Union Mission and a total of 80 patients were receiving treatment at Alliance Recovery Center. There were a total of 149 respondents for the study.

Table 8

Programs in study

Variable	Frequency	Percent
Atlanta Union Mission	69	46.3
Alliance Recovery Center	80	53.7
Total	149	100.0

Table 9 is a cross tabulation of treatment programs helping participants stop using illicit drugs. It shows the association of Atlanta Union Mission with Alliance Recovery Center and indicates whether or not there was a statistically significant relationship between the two variables.

Table 9

My treatment program has helped me stop using drugs

Program	Stop Using Drugs				Total	
	Disagree		Agree			
	#	%	#	%	#	%
Atlanta Union Mission	7	4.7	62	41.6	69	46.3
Alliance Recovery Center	9	6.0	71	47.7	80	53.7
Total	16	10.7	133	89.3	149	100.0

$\Phi = .047$ $df = 1$ $p = .828$

As stated in Table 9, ten point seven percent (10.7%) of the respondents indicated that their treatment program did not help them stop using drugs. A majority (89.3%) indicated that their treatment program helped them stop using drugs. However, when the two treatment programs were cross tabulated, of the 69 respondents at the Atlanta Union Mission, 4.7% disagreed and 41.6% agreed and of the 80 respondents at Alliance Recovery Center, 6% disagreed and 47.7% agreed.

As shown in Table 9, the statistical measurement phi (Φ) was employed to test for the strength of association between the two treatment programs helping program participants stop using drugs. As indicated, there was no relationship ($\Phi = .047$) between the two variables. When the chi-square statistical test for significance was applied, the null hypothesis was accepted ($p = .828$) indicating that there was a statistically significant relationship between the two treatment programs at the .05 level of probability.

Table 10 is a cross tabulation of the occasional use of illicit drugs. It shows the association of Atlanta Union Mission with Alliance Recovery Center and indicates whether or not there was a statistically significant relationship between the two variables.

Table 10

I use illicit drugs occasionally

Program	Occasional Drug Use				Total	
	Disagree		Agree			
	#	%	#	%	#	%
Atlanta Union Mission	62	42.2	5	3.4	67	45.6
Alliance Recovery Center	57	38.8	23	15.6	80	54.4
Total	119	81.0	28	19.0	147	100.0

$\Phi = 10.717$ $df = 3$ $p = .001$

As shown in Table 10, a majority (81%) of the respondents indicated that they do not use illicit drugs occasionally. Nineteen percent (19%) indicated that they are

occasional drug users. However, when the two treatment programs were cross tabulated, of the 67 respondents at Atlanta Union Mission, 42.2 indicated that they did not use illicit drugs occasionally and 3.4% agreed that they did use occasionally and of the 80 respondents at Alliance Recovery Center, 38.8% indicated that they were not occasional illicit drug users and 15.6% indicated that they do occasionally use illicit drugs.

As shown in Table 10, the statistical measurement phi (Φ) was employed to test for the strength of association between Atlanta Union Mission and Alliance Recovery Center. As stated, there was a strong relationship ($\Phi = 10.716$) between the two variables. When the chi-square statistical test for significance was applied, the null hypothesis was rejected ($p = .001$) indicating that there was a statistically significant difference between the two variables at the .05 level of probability.

Research Question 2: Is there a difference in the outcome of faith-based substance abuse treatment participants' family relationships and contingency management substance abuse treatment participants' family relationship?

Hypothesis 2: There is no statistically significant difference between the outcome of faith-based substance abuse treatment participants' family relationships and the outcome of contingency management substance abuse treatment participants' family relationships.

Family relationships among faith-based and contingency management
program participants

The U.S. Department of Health and Human Services (2004) indicates that family education and therapy are important in substance abuse treatment because different treatment issues emerge based on the age and role of the substance abuser in the family and on whether small children or adolescents are present. Several characteristic patterns of interactions are likely to be present in a family: constant complaints, parental inconsistency, parental denial, miscarried expression of anger, self medication, unrealistic parental expectations, economic and psychological problems between partners, fetal alcohol syndrome, conflict and continual crisis, violent behavior, risky sexual behavior and impulsivity.

Cost effectiveness of substance abuse treatment is an important issue in current welfare policy discussion for two principle reasons. First, substance abuse by parents may have serious and potentially permanent effects on their children. Substance abuse by parents may increase the risk of retardation, learning impairments, poor school achievement, physical and emotional neglect and abuse, and the risk that children will eventually abuse alcohol or other drugs (U.S. Department of Health and Human Services, 1997).

Table 11 is a cross tabulation of whether the respondents got along with family members when using illicit drugs. It shows the association of Atlanta Union Mission with Alliance Recovery Center and whether or not there was a statistically significant relationship between the two variables.

Table 11

I did not get along with family members when using illicit drugs

Program	Get Along With Family Members				Total	
	Disagree		Agree		#	%
	#	%	#	%		
Atlanta Union Mission	24	16.2	43	29.1	68	45.9
Alliance Recovery Center	19	12.8	61	41.2	80	54.1
Total	43	29.1	104	70.3	148	100.0

$\Phi = 3.748$ $df = 2$ $p = .153$

As indicated in Table 11, twenty-nine point one percent (29.1%) of respondents indicated that they got along with their family members when using illicit drugs whereas a majority (70.3%) stated that they did not get along with family members when using illicit drugs. However, when the two treatment programs were cross tabulated, of the 68 respondents at Atlanta Union Mission, 16.2% stated that they were able to get along with family members when using illicit drugs and 29.1% stated that they were not. Of the 80 respondents at Alliance Recovery Center, 12.8% stated that they were able to get along with family members when using illicit drugs and 41.2% agreed that they had problems getting along with family members when using illicit drugs.

As shown in Table 11, the statistical measurement phi (Φ) was employed to test for the strength of association between Atlanta Union Mission and Alliance Recovery Center. As indicated, there was a strong relationship ($\Phi = 3.748$) between the two

variables. When the chi-square statistical test for significance was applied, the null hypothesis was accepted ($p = .153$) indicating that there was a statistically significant relationship between the two variables at the .05 level of probability.

Table 12 is a cross tabulation of family members support during recovery. It shows the association of Atlanta Union Mission with Alliance Recovery Center and family members support during participants' recovery and indicates whether or not there was a statistically significant relationship between the two variables.

Table 12

My family members are supportive of my recovery

Program	Family Members Supportive				Total	
	Disagree		Agree			
	#	%	#	%	#	%
Atlanta Union Mission	7	4.7	61	41.2	68	45.9
Alliance Recovery Center	9	6.1	71	48.0	80	54.1
Total	16	10.8	132	89.2	148	100.0

$\Phi = .035$ $df = 1$ $p = .852$

As indicated in Table 12, ten point eight percent (10.8%) indicated that their family members were not supportive of their recovery, whereas a majority (89.2%) indicated that family members were supportive of their recovery. However, when the two treatment programs were cross tabulated, of the 68 respondents at Atlanta Union Mission,

4.7% indicated that family members were not supportive of their recovery and 41.2 % indicated that they were. Of the 80 respondents at Alliance Recovery Center, 6.1% indicated that family members were not supportive of their recovery and 48% indicated that they were.

As shown in Table 12, the statistical measurement phi (Φ) was employed to test for the strength of association between Atlanta Union Mission and Alliance Recovery Center. As indicated, there was no relationship ($\Phi = .035$) between the two variables. When the chi-square statistical test for significance was applied, the null hypothesis was accepted ($p = .852$) indicating that there was a statistically significant relationship between the two variables at the .05 level of probability.

Research Question 3: Is there a difference in the outcome of faith-based substance abuse treatment participants' employment status and contingency management substance abuse treatment participants' employment status?

Hypothesis 3: There is no statistically significant difference in the outcome of faith-based substance abuse treatment participants' employment status and contingency management substance abuse treatment participants' employment status.

Employment among faith-based and contingency management program participants

Substance abuse treatment plays an integral role in achieving work readiness, as well as enhancing work performance. Treatment has become a higher priority on state legislators' agendas now that welfare caseloads have declined. Substance abuse is the most commonly reported barrier to work among parents on welfare. Recent studies indicated that anywhere from 5 percent to 35 percent of the Temporary Assistance to Needy Families (TANF) caseload suffers from a substance abuse problem that impairs their ability to become employed and to be an effective parent. Substance abuse can prevent welfare recipients from obtaining employment, can interfere with job performance and advancement, and can result in job loss (National Conference of State Legislatures, 2003).

In substance abuse treatment, employment is often viewed as both a desired outcome and as an element of treatment. Work is not only a means of establishing a legal source of income but also a possible way to boost self-esteem and re-socialization. Employment is often associated with an increased likelihood of treatment retention. Studies have shown that following substance abuse treatment, there is an increase in the percentage of participants working and their income and a decrease in employment problem severity scores (Ginexi, 2003).

Table 13 is a cross tabulation of respondents experiencing employment problems because of their illicit drug use. It shows the association with Atlanta Union Mission and Alliance Recovery Center and indicates whether or not there was a statistically significant relationship between the two variables.

Table 13

I had employment problems because of my illicit drug use

Program	Employment Problems				Total	
	Disagree		Agree			
	#	%	#	%	#	%
Atlanta Union Mission	19	12.8	49	33.1	68	45.9
Alliance Recovery Center	19	12.8	61	41.2	80	54.1
Total	38	25.7	110	74.3	148	100.0

$\Phi = .338$ $df = 1$ $p = .561$

As indicated in Table 13, twenty-five point seven percent (25.7%) of the respondents stated that they did not have employment problems because of their illicit drug use and a majority (74.3%) stated that they had employment problems because of their illicit drug use. However, when the two treatment programs were cross tabulated, the two treatment programs matched (12.8%) regarding respondents not having employment problems because of their illicit drug use. Of the 68 respondents at Atlanta Union Mission, 33.1% stated that they did have employment problems because of their illicit drug use and of the 80 respondents at Alliance Recovery Center 41.2% also agreed that they had employment problems because of illicit drug use..

As shown in Table 13, the statistical measurement phi (Φ) was employed to test for the strength of association between Atlanta Union Mission and Alliance Recovery Center. As indicated, there was a weak relationship ($\Phi = .338$) between the two

variables. When the chi-square statistical test for significance was applied, the null hypothesis was accepted ($p = .561$) indicating that there was a statistically significant relationship between the two variables at the .05 level of probability.

Table 14 is a cross tabulation of treatment programs helping participants maintain employment. It shows the association of Atlanta Union Mission with Alliance Recovery Center helping respondents maintain employment and indicates whether or not there was a statistically significant relationship between the two variables.

Table 14

My treatment program has helped me maintain employment

Program	Helped Me Maintain Employment				Total	
	Disagree		Agree			
	#	%	#	%	#	%
Atlanta Union Mission	15	11.3	41	30.8	56	42.1
Alliance Recovery Center	14	10.5	63	47.4	77	57.9
Total	29	21.8	104	78.2	133	100.0

$\Phi = 1.408$ $df = 1$ $p = .235$

As indicated in Table 14, twenty-one point eight percent (21.8%) of the respondents indicated that the treatment program did not helped them maintain employment and a majority (78.2%) stated that their program did help them maintain employment. However, when the two treatment programs were cross tabulated, of the 56

respondents at Atlanta Union Mission, 11.3% stated that the treatment program did not help them maintain employment and 30.8% agreed that the program did help them maintain employment. Of the 77 respondents at Alliance Recovery Center, 10.5% indicated that the program did not help them maintain employment and 47.4% agreed that the program did help them maintain employment.

As shown in Table 14, the statistical measurement phi (Φ) was employed to test for the strength of association between Atlanta Union Mission and Alliance Recovery Center. As indicated, there was a strong relationship ($\Phi = 1.408$) between the two variables. When the chi-square statistical test for significance was applied, the null hypothesis was accepted ($p = .235$) indicating that there was a statistically significant relationship between the two variables at the .05 level of probability.

In summary, the data in this chapter answered the three research questions relative to the effectiveness of faith-based substance abuse treatment and contingency management substance abuse treatment in the areas of continuous illicit drug use, family relationships and employment. Although nineteen percent (19%) of the respondents stated that they continue to use illicit drugs occasionally, 89.3% stated that the treatment programs have helped them stop using illicit drugs. Regarding family relationships, 104 respondents did not get along with family members prior to treatment and since treatment, 132 stated that family member are supportive of their recovery.

A total of 110 respondents had employment problems before treatment and during treatment 104 were able to maintain employment because of the support received from their treatment program. Therefore, it is concluded that the majority of respondents at

Atlanta Union Mission and Alliance Recovery Center experienced satisfaction with the services provided at both treatment programs.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

This research study was designed to answer three questions concerning illicit drug use, family relationships and employment among participants of faith-based and contingency management treatment programs. According to the national standards, the dependent variables in this study are considered three of the targeted areas for substance abuse treatment outcomes.

The conclusion and recommendations of the research findings are presented in this chapter. Recommendations are proposed for future discussions for social workers, administrators of substance abuse treatment programs and policy makers. Each research question is presented in order to summarize the significant findings of interest.

Research Question 1: Is there a difference in the outcome of faith-based substance abuse treatment participants' continuous illicit drug use and contingency management substance abuse treatment participants' continuous illicit drug use?

In order to determine if there was a difference in the outcome of faith-based substance abuse treatment participants' continuous illicit drug use and contingency

management substance abuse treatment participants' continuous illicit drug use, the frequency of each program participant was calculated and respondents were asked to respond to two statements: (1) My treatment program helped me stop using illicit drugs and (2) I use illicit drugs occasionally. Phi (Φ) was employed to determine the strength of the association between the two treatment programs and chi-square was employed to determine if there was a statistically significant relationship between the dependent variable of illicit drug use and each of the treatment approaches.

Of the 69 respondents at the faith-based substance abuse treatment program, 41.6% agreed that their treatment program helped them stop using illicit drugs and of the 80 respondents at the contingency management substance abuse treatment program, 47.7% agreed that their treatment program helped them stop using illicit drugs. Disagreements amongst both treatment approaches respondents were closely matched. Faith-based participants' responses were 4.7% and contingency management participants' responses were 6.0% (See Table 9).

The statistical measurement phi (Φ) was employed to test for the strength of association between treatment provided at Atlanta Union Mission and Alliance Recovery Center, in the area of continuous illicit drug use. As indicated, there was a weak relationship ($\Phi = .047$) between the two variables. When the chi-square statistical test for significance was applied, the null hypothesis was accepted ($p = .828$) indicating that there was a statistically significant relationship between the two variables at the .05 level of probability (See Table 9).

Of the 67 respondents at the faith-based substance abuse treatment program, 42.2% indicated that they did not use illicit drugs occasionally and of the 80 respondents at the contingency management substance abuse treatment program, 38.8% indicated that they did not use illicit drugs occasionally. Only 3.4% of the respondents at the faith-based substance abuse treatment program indicated that they use illicit drugs occasionally, whereas 15.6% of the contingency management group reported occasional illicit drug use (See Table 10).

The statistical measurement phi (Φ) was employed to test for the strength of association between the treatment provided at Atlanta Union Mission and Alliance Recovery Center, in the area of continuous illicit drug use. As indicated, there was a strong relationship ($\Phi = 10.716$) between the two variables. When the chi-square statistical test for significance was applied, the null hypothesis was rejected ($p = .001$) indicating that there was a statistically significant difference between the two variables at the .05 level of probability (See Table 10).

Research Question 2: Is there a difference in the outcome of faith-based substance abuse treatment participants' family relationships and contingency management substance abuse treatment participant's family relationships?

In order to determine if there was a difference in the outcome of faith-based substance abuse treatment participants' family relationships and contingency management

substance abuse treatment participants' family relationships, the frequency of each program participant was calculated and respondents were asked to respond to two statements: (1) I did not get along with my family members when using illicit drugs and (2) My family member are supportive of my recovery. Phi (Φ) was employed to determine the strength of the association between the two treatment programs and chi-square was employed to determine if there was a statistically significant relationship between the dependent variable of family relationships and each of the treatment approaches.

Of the 67 respondents at the faith-based substance abuse treatment program, 29.1% indicated that they did not get along with family members while using illicit drugs and of the 80 respondents at the contingency management substance abuse treatment program, 41.2% indicated that they did get along with family members while using illicit drugs. Sixteen point two percent (16.2%) of respondents at the faith-based substance abuse treatment program indicated that they were able to get along with family members despite their illicit drug use and 12.8% of respondents at the contingency management population reported the same (See Table 11).

The statistical measurement phi (Φ) was employed to test the strength of association between the treatment provided at Atlanta Union Mission and Alliance Recovery Center, in the area of family relationships. As indicated, there was a strong relationship ($\Phi= 3.748$) between the two variables. When the chi-square statistical test for significance was applied, the null hypothesis was accepted ($p = .153$) indicating that

there was a statistically significant relationship between the two variables at the .05 level of probability (See Table 11).

Of the 68 respondents at the faith-based substance abuse treatment program, 41.2% agreed that their family members are supportive of their recovery and of the 80 respondents at the contingency management substance abuse treatment program, 48.0% indicated the same. Disagreements amongst both treatment approaches respondents were closely matched. Faith-based participants' response was 4.7% and contingency management participants' response was 6.1% (See Table 12).

The statistical measurement phi (Φ) was employed to test the strength of association between the treatment provided at Atlanta Union Mission and Alliance Recovery Center, in the area of family relationships. As indicated, there was a weak relationship ($\Phi = .035$) between the two variables. When the chi-square statistical test for significance was applied, the null hypothesis was accepted ($p = .852$) indicating that there was a statistically significant relationship between the two variables at the .05 level of probability (See Table 12).

Research Question 3: Is there a difference in the outcome of faith-based substance abuse treatment participants' employment status and contingency management substance abuse treatment participants' employment status?

In order to determine if there was a difference in the outcome of faith-based substance abuse treatment participants' family relationships use and contingency management substance abuse treatment participants' employment, the frequency of each program participant was calculated and respondents were asked to respond to two statements: (1) I had employment problems because of my illicit drug use and (2) My treatment program has helped me maintain employment. Phi (Φ) was employed to determine the strength of the association between the two treatment programs and chi-square was employed to determine if there was a statistically significant relationship between the dependent variable of employment and each of the treatment approaches.

Of the 68 respondents at the faith-based substance abuse treatment program, 33.1% indicated that they had employment problems because of illicit drug use and of the 80 respondents at the contingency management substance abuse treatment program, 41.2% indicated that they also had employment problems because of their illicit drug use. The treatment approaches matched in respondents' disagreement regarding employment problems due to illicit drug use. Both percentages were 12.8% (See Table 13).

The statistical measurement phi (Φ) was employed to test the strength of association between the treatment provided at Atlanta Union Mission and Alliance Recovery Center, in the area of employment. As indicated, there was a weak relationship ($\Phi = .335$) between the two variables. When the chi-square statistical test for significance was applied, the null hypothesis was accepted ($p = .561$) indicating that there was a statistically significant relationship between the two variables at the .05 level of probability (See Table 13).

Of the 56 respondents at the faith-based substance abuse treatment program, 30.8% agreed that their treatment program has helped them maintain employment and of the 77 respondents at the contingency management substance abuse treatment program, 47.4% indicated the same. Disagreements amongst both treatment approaches respondents were again closely matched. Faith-based participants' was 11.3% and contingency management participants' response was 10.5% (See Table 14).

The statistical measurement phi (Φ) was employed to test the strength of association between the treatment provided at Atlanta Union Mission and Alliance Recovery Center, in the area of employment. As indicated, there was a strong relationship ($\Phi = 1.408$) between the two variables. When the chi-square statistical test for significance was applied, the null hypothesis was accepted ($p = .235$) indicating that there was a statistically significant relationship between the two variables at the .05 level of probability (See Table 14).

Recommendations

Substance abusers present numerous challenges to clinicians responsible for helping them. Their disorders are usually chronic and recurrent and they usually have other psychological, physical and social problems. Most mental health professionals do not receive sufficient training in the treatment of substance abuse, making their job more difficult.

As a result of the findings of this study, the researcher is recommending the following:

1. Social workers should engage in research that will provide data on this population group that will be helpful in facilitating delivery of services.
2. According to A Bureau of Labor Statistic (2004), there were 95,000 social work positions in mental health and substance abuse in 2002, and positions are expected to increase through 2012. This is based on the placement of substance abusers into treatment instead of into the criminal justice system. Often, social workers are the first service providers to come in contact with substance abusers in various treatment settings. They often provide key assessment and referral services in an array of service delivery settings. They provide services to more patients with substance abuse disorders than do any other helping professions. Because of this, social work curricula should be extended to include more courses on the treatment of the substance abusers to ensure that social workers are adequately trained to care for this population.
3. Many of the women in substance abuse treatment are welfare recipients with timeframes for becoming active members of the workforce. Social workers should become advocates for this population group to insure that they receive adequate training, job referrals and placements.
4. Program administrators should take advantage of the statewide latitude and funding to help the low-income substance abusing population attain self-sufficiency and become gainfully employed.

5. Policy makers should insure that the Access to Recovery program is continuously extended to include additional states. This will allow substance abusers not involved with the criminal justice system and welfare system to receive treatment at an affordable cost.

APPENDICES

APPENDIX A

Letter to Lashan Mabry

October 28, 2006

Ms. Lashan Mabry, Director
Atlanta Union Mission
My Sister's House
921 Howell Mill Road, N.W.
Atlanta, Georgia 30318

Dear Ms. Freeman:

I am a student in the Ph.D. Program at the Whitney M. Young, Jr., School of Social Work at Clark Atlanta University. I am conducting a dissertation research on *A Study of Illicit Drug Use, Family Relationships, and Employment of Patients of Faith-based and Contingency Management Substance Abuse Treatment Programs*. The purpose of the study is to compare two substance abuse treatment approaches, in the Metropolitan Atlanta area, and evaluate them in the areas of continuous illicit drug use, family support and employment. The findings will be used in an analysis for my dissertation.

I would like to have at least 40 of your program participants be a part of this study. To ensure confidentiality of all information, participants will not be required to put their names on the questionnaire answer sheet. The questionnaire should take only five minutes to complete.

I would truly appreciate your support in completing this research project. Please allow me to meet with you sometime during the month of November 2006, to further discuss my research project and to answer any questions that you may have.

Sincerely,

Elaine Rowland Tophia
Ph.D. Candidate
Clark Atlanta University
Whitney M. Young, Jr., School of Social Work

APPENDIX B

Letter to James Taylor

October 28, 2006

Mr. James Taylor, Clinical Director
Alliance Recovery Center
209B Swanton Way
Decatur, Georgia 30030

Dear Mr. Taylor:

I am a student in the Ph.D. Program at the Whitney M. Young, Jr., School of Social Work at Clark Atlanta University. I am conducting a dissertation research on *A Study of Illicit Drug Use, Family Relationships, and Employment of Patients of Faith-based and Contingency Management Substance Abuse Treatment Programs*. The purpose of the study is to compare two substance abuse treatment approaches, in the Metropolitan Atlanta area, and evaluate them in the areas of continuous illicit drug use, family support and employment. The findings will be used in an analysis for my dissertation.

I would like to have at least 80 of your program participants be a part of this study. To ensure confidentiality of all information, participants will not be required to put their names on the questionnaire answer sheet. The questionnaire should take only five minutes to complete.

I would truly appreciate your support in completing this research project. Please allow me to meet with you sometime during the month of November 2006, to further discuss my research project and to answer any questions that you may have.

Sincerely,

Elaine Rowland Tophia
Ph.D. Candidate
Clark Atlanta University
Whitney M. Young, Jr., School of Social Work

APPENDIX C

Letter to Reverend Brian Wright

October 28, 2006

Reverend Brian Wright
Atlanta Union Mission
The Carpenter's House
2355 Bolton Road, N.W.
Atlanta, Georgia 30318

Dear Rev. Wright:

I am a student in the Ph.D. Program at the Whitney M. Young, Jr., School of Social Work at Clark Atlanta University. I am conducting a dissertation research on *A Study of Illicit Drug Use, Family Relationships, and Employment of Patients of Faith-based and Contingency Management Substance Abuse Treatment Programs*. The purpose of the study is to compare two substance abuse treatment approaches, in the Metropolitan Atlanta area, and evaluate them in the areas of continuous illicit drug use, family support and employment. The findings will be used in an analysis for my dissertation.

I would like to have at least 40 of your program participants be a part of this study. To ensure confidentiality of all information, participants will not be required to put their names on the questionnaire answer sheet and I will not need to have direct contact with them. The questionnaire should take only five minutes to complete.

I would truly appreciate your support in completing this research project. Please allow me to meet with you this week to further discuss my research project and to answer any questions that you may have.

Sincerely,

Elaine Rowland Tophia
Ph.D. Candidate
Clark Atlanta University
Whitney M. Young, Jr., School of Social Work

APPENDIX D

Letter to Reverend Alcono Ekundayo

February 8, 2007

Reverend Alcono Ekundayo
Atlanta Union Mission
Fuqua Hall
144 Mill Street, N.W.
Atlanta, Georgia 30313

Dear Rev. Ekundayo:

I am a student in the Ph.D. Program at the Whitney M. Young, Jr., School of Social Work at Clark Atlanta University. I am conducting a dissertation research on *A Study of Illicit Drug Use, Family Relationships, and Employment of Patients of Faith-based and Contingency Management Substance Abuse Treatment Programs*. The purpose of the study is to compare two substance abuse treatment approaches, in the Metropolitan Atlanta area, and evaluate them in the areas of continuous illicit drug use, family support and employment. The findings will be used in an analysis for my dissertation.

I would like to have at least 40 of your program participants be a part of this study. To ensure confidentiality of all information, participants will not be required to put their names on the questionnaire answer sheet and I will not need to have direct contact with them. The questionnaire should take only five minutes to complete.

I would truly appreciate your support in completing this research project. Please allow me to meet with you this week to further discuss my research project and to answer any questions that you may have.

Sincerely,

Elaine Rowland Tophia
Ph.D. Candidate
Clark Atlanta University
Whitney M. Young, Jr., School of Social Work

Survey Questionnaire

I am a student in the Ph.D. Program at the Whitney M. Young, Jr., School of Social Work at Clark Atlanta University. I invite you to participate in a substance abuse treatment study of patients in faith-based and contingency management treatment. The questionnaire will take only five minutes to complete. The purpose of the study is to compare two treatment approaches and evaluate them in the areas of illicit drugs, family support and employment. The findings will be used in an analysis for my dissertation. I would appreciate your cooperation. Because we want all responses to remain confidential, please do not put your name on the questionnaire answer sheet. Choose only one answer for each question. Please respond to all questions. Again, thank you for your time and cooperation.

////////////////////////////////////

Place a mark (X) next to the appropriate item. Choose only one answer for each statement.

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APPENDIX E

(continued)

6. Annual Income 1) _____ Under \$10,000 2) _____ \$10,000 – 13,999
 3) _____ \$14,000 – 17,999 4) _____ \$18,000 – 21,999
 5) _____ \$22,000 – 25,999 6) _____ \$26,000 – 29,999
 7) _____ \$30,000 & Up
7. Employment Status: 1) _____ Unemployed 2) _____ Full-time 3) _____ Part-time
8. Are you still using drugs? 1) _____ No 2) _____ Yes
9. What drug(s) are you being treated for? 1) _____ Alcohol 2) _____ Marijuana
 3) _____ Cocaine/Crack 4) _____ Heroin 5) _____ Methamphetamine 6) _____ Opiates
 7) _____ Multiple-substances
10. How long have you been in treatment? 1) _____ 1-6 months 2) _____ 7-12 months
 3) _____ 13-18 months 4) _____ 19-24 months 5) _____ more than 2 years
11. My treatment program provides family education and therapy support
 1) _____ No 2) _____ Yes

Section II: How much do you agree or disagree with the following statements?

Write the appropriate number (1 thru 4) in the blank space beside each statement on the questionnaire.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

Illicit Drug Use

- _____ 12. My treatment program has helped me stop using illicit drugs.
- _____ 13. I use illicit drugs occasionally.

APPENDIX E

(continued)

Family Relationships

- _____ 14. I did not get along with my family members when I was using illicit drugs.
- _____ 15. My family members are supportive of my recovery.

Employment

- _____ 16. I had employment problems because of my drug use.
- _____ 17. My treatment program has helped me maintain employment.

Thank you very much for your cooperation.

APPENDIX F

SPSS Program Analysis

TITLE 'STUDY OF ILLICIT DRUG USE, FAMILY RELATIONSHIPS & EMPLOYMENT'.
SUBTITLE 'Elaine R Tophia - PhD Program CAU School of Social Work'

'COMMITTEE MEMBERS'

'Richard Lyle, PhD - Chair

'Clinton Dye, PhD'

'Robert Waymer, PhD'.

DATA LIST FIXED/

ID	1-3
GENDER	4
AGEGRP	5
ETHNIC	6
EDUC	7
MARITAL	8
INCOME	9
EMPLOY	10
USING	11
WHATDR	12
LONG	13
TREAT	14
ILLICIT1	15
ILLICIT2	16
FAMIL1	17
FAMIL2	18
DREMP1	19
DREMP2	20
FACILA	21.

VARIABLE LABELS

ID	'Case Number'
GENDER	'Q1 Gender'
AGEGRP	'Q2 Age Group'
ETHNIC	'Q3 Ethnicity'
EDUC	'Q4 Education'
MARITAL	'Q5 Marital Status'
INCOME	'Q6 Annual Income'
EMPLOY	'Q7 Employment Status'
USING	'Q8 Are you still using drugs'
WHATDR	'Q9 What drugs are you being treated for'
LONG	'Q10 How long have you been in treatment'
TREAT	'Q11 My treatment program provides family support'
ILLICIT1	'Q12 My treatment program has helped me stop using drugs'
ILLICIT2	'Q13 I use illicit drugs occasionally'
FAMIL1	'Q14 I did not get along with my family when using illicit drugs'
FAMIL2	'Q15 My family members are supportive of my recovery'

APPENDIX F

(continued)

DREMP1 'Q16 I had employment problems because of my drug use'
 DREMP2 'Q17 My treatment program has helped me maintain
 employment'
 FACILA 'Q18 Facilities included in the study'.

VALUE LABELS

GENDER

- 1 'Female'
- 2 'Male'/'

AGEGRP

- 1 'Under 20'
- 2 '20 - 29'
- 3 '30 - 39'
- 4 '40 - 49'
- 5 '50 - 59'
- 6 '60 up'/'

ETHNIC

- 1 'African American'
- 2 'Caucasian'
- 3 'Hispanic'
- 4 'Asian'
- 5 'Native American'
- 6 'Other'/'

EDUC

- 1 'Elementary'
- 2 'Junior High'
- 3 'High School Grad'
- 4 'Vocational'
- 5 'Some College'
- 6 'College Grad'/'

MARITAL

- 1 'Married'
- 2 'Never Married'
- 3 'Divorced'
- 4 'Widowed'/'

INCOME

- 1 'Under \$10,000'
- 2 '\$10,000-13,999'
- 3 '\$14,000-17,999'
- 4 '\$18,000-21,999'
- 5 '\$22,000-25,999'
- 6 '\$26,000-29,999'
- 7 '\$30,000 up'/'

EMPLOY

- 1 'Unemployed'
- 2 'Full-time'
- 3 'Part-time'/'

USING

- 1 'No'
- 2 'Yes'/'

APPENDIX F

(continued)

WHATDR

- 1 'Alcohol'
- 2 'Marijuana'
- 3 'Cocaine-Crack'
- 4 'Heroin'
- 5 'Methamphetamine'
- 6 'Opiates'
- 7 'Multiple Substances'/'

LONG

- 1 '1 - 6 months'
- 2 '7 - 12 months'
- 3 '13 - 18 months'
- 4 '19 - 24 months'
- 5 'More than 2 Yrs'/'

TREAT

- 1 'No'
- 2 'Yes'/'

ILLICIT1

- 1 'Strongly Disagree'
- 2 'Disagree'
- 3 'Agree'
- 4 'Strongly Agree'/'

ILLICIT2

- 1 'Strongly Disagree'
- 2 'Disagree'
- 3 'Agree'
- 4 'Strongly Agree'/'

FAMIL1

- 1 'Strongly Disagree'
- 2 'Disagree'
- 3 'Agree'
- 4 'Strongly Agree'/'

FAMIL2

- 1 'Strongly Disagree'
- 2 'Disagree'
- 3 'Agree'
- 4 'Strongly Agree'/'

DREMP1

- 1 'Strongly Disagree'
- 2 'Disagree'
- 3 'Agree'
- 4 'Strongly Agree'/'

DREMP2

- 1 'Strongly Disagree'
- 2 'Disagree'
- 3 'Agree'
- 4 'Strongly Agree'/'

FACILA

- 1 'Union Mission'
- 2 'Alliance Recovery'/'.

APPENDIX F

(continued)

RECODE ILLICIT1 ILLICIT2 FAMIL1 FAMIL2 DREMP1 DREMP2 (1 THRU 2.99=2) (3 THRU 4.99=3).

MISSING VALUES

GENDER AGEGRP ETHNIC EDUC MARITAL INCOME EMPLOY USING
WHATDR LONG TREAT ILLICIT1 ILLICIT2 FAMIL1 FAMIL2 DREMP1
DREMP2 FACILA (0).

BEGIN DATA

001122331115124144321
002141647110124444141
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009141617113112114121
010151621117124124401
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014151514113113124201
015141511113113223301
016132320113124114421
017142631111124114421
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APPENDIX F

(continued)

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052222626117424124242
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076232537216124144332
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080252347214514223142
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082132621114123333322
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092222321216123224232
093262212316524134332
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095242241116523233322

APPENDIX F

(continued)

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098241511216213233332
099251524227522332332
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101142521124112332322
102251444214523233332
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140241535221523233331
141241627217524124441
142242315217114114111
143241311117211212341
144241334217323233221
145251534213214134321
146251513217113143441
147261313217323233331

APPENDIX F

(continued)

148251245217324131441
149231514212124144341
150231411313223233331
END DATA.

FREQUENCIES
/GENDER AGEGRP ETHNIC EDUC MARITAL INCOME EMPLOY USING
WHATDR LONG TREAT ILLICIT1 ILLICIT2 FAMIL1 FAMIL2 DREMP1
DREMP2 FACILA
/STATISTICS =.

BIBLIOGRAPHY

- Alexander, W. (1997). Cool water: Alcoholism, mindfulness and ordinary recovery.
Boston: Shambhala Publications.
- Babbie, E. (1995). The practice of social work research. Belmont: Wadsworth.
- Belkin, G.S. & Gray, J.L. (1977). Educational psychology: An introduction.
Dubuque, Iowa: Wm. C. Brown Company Publishers.
- Bencivengo, M. & Cutler, S.J. (1993). Drug use in Philadelphia, Pennsylvania In
National Institute on Drug Abuse (NIDA), Epidemiologic trends in drug abuse.
Community Epidemiology Work Group. 2: Proceedings. 176-188.
- Skinner, B.F. (2003). Behavioralism & language behavior. http://www3.niu.edu/acad/psych/Millis/History/2003/cogrev_skinner.htm.
- Black, B. (2004). Substance abuse and dependence. http://www.findarticles.com/p/articles/mi_gGENH/is_/ai_2699003761.
- Blocher, D. (1980). Developmental counseling revisited. Counseling and Human Development. 13, 1-7.
- Block, R.I. (2004). Relation of premorbid cognitive abilities to substance users' problems at treatment intake and improvements with substance abuse treatment and case management. American Journal of Drug and Alcohol Abuse.
http://www.findarticles.com/p/articles/mi_m0978/is_3_29/ai_109351414/.

- Blumenthal, S.J. (1998). Women and substance abuse: A new national focus. In Drug addiction and the health of women. (Eds.). Cora Lee Wetherington and Adele B. Roman. Rockville, MD: NIDA.
- Bradburn, N. & Sudman, S. (1988). Polls & surveys: Understanding what they tell us. San Francisco: Jossey-Bass.
- Brolin, M.F. (2000). Substance abuse treatment outcomes and system improvements. <http://www.mass.gov/dph/bsas/forms/outcomes.pdf>.
- Brome, D.R. & Deaneen, M. (2000). An examination of spirituality among African American women in recovery from substance abuse. Journal of Black Psychology. 26(4), 470-486.
- Burdon, W.M., Roll, J.M., Prendergast, M.L. & Rawson, R.A. (2001). Drug courts and contingency management. Journal of Drug Issues. 31(1), 73-90.
- Bustamante, L., Howe-Tennant, D., & Ramo, C. (1996). The behavioral approach. <http://facultyweb.cortland.edu/-ANDERSMD/BEH/BEHAVIOR.HTML>.
- Califano, Jr., J.A. & Sheehan, M.J. (2002). Religion, science and substance abuse. America. 186(4), 8-11.
- Carroll, M.M. (1997). Spirituality, alcoholism, and recovery: An exploratory study. Alcoholism Treatment Quarterly. 15(4), 89-100.
- Carroll, K.M., Chang, G., Behr, H., & Clinton, B. (1995). Improving treatment outcome in pregnant, methadone-maintained women: Results from a randomized clinical trial. American Journal of Addiction. 4, 56-59.

Carson, R.C. & Butcher, J.N. (1992). Abnormal psychology and modern life. (9th ed.).

New York: Harper Collins Publishing, Inc.

Center for Disease Control & Prevention National Center for HIV, STD, and TB

Prevention Divisions of HIV/AIDS Prevention. Methadone maintenance treatment. (2002). <http://www.cdc.gov/idu/facts/Methadone.htm>.

Childress, A.R., McLellan, A.T., & O'Brian, C.P. (1985). Behavioral therapies for substance abuse. International Journal of Addiction. 20, 947-969.

Cilente, J. (2003). Cognitive theory and therapy in substance abuse treatment.

Mental Health Matters. <http://www.mental-health-matters.com>.

Clark, H.W. (2001). Residential substance abuse treatment for pregnant and postpartum women and their children: Treatment and policy implications. Child Welfare. 80(2), 179-198.

Coletti, S.D. (1998). Service providers and treatment access issues. In Cora L.

Wetherington & Adele B. Roman. (Eds.). Drug addiction research and the health of women. Rockville, MD: NIDA.

Current, W.F. (2002). Cut costs and increase safety with pre-employment drug testing.

Occupational Hazards. 64(7), 55-58.

Czuchry, M. (2003). Cognitive skills training: Impact on drug abuse counseling and

readiness for treatment –[dagger] http://www.findarticles.com/p/articles/mi_m0978/is_1_29/ai_101175126.

- Dermatis H., Guschwan, M.T., Galanter, M., & Blunt, G. (2004). Orientation and self-help approaches in the therapeutic community. Journal of Addictive Diseases. 23, 39-54.
- Desmond, D.P. & Maddux, J.F. (1981). Religious programs and careers of chronic heroin users. American Journal of Drug and Alcohol Abuse. 8(1), 71-83.
- DiLorenzo, P., Johnson, R., & Bussey, M. (2001). The role of spirituality in the recovery process. Child Welfare. 80(2), 257-274.
- Dodge, K. & Potocky-Tripodi, M. (2001). The effectiveness of three inpatient intervention strategies for chemically dependent women. Research on Social Work Practice. 11(1), 24-39.
- Drug addiction and drug abuse. (2005). The Columbia Encyclopedia, 6th Edition. <http://www.bartleby.com/65/dr/drugaddi.html>.
- Drug and substance abuse. (2004). Signs, effects and treatment of addiction. http://www.helpguide.org/mental/drug_substance_abuse_addiction_signs_effects_treatmen...
- Ettorre, E.M. (1983). Women and substance use. New Brunswick, NJ: Rutgers University Press.
- Ellis, B., Ping Yu, T.B., Burgdorf, K., Herrell, J. & Roberts, T. (2002). Effect of social support on substance abuse among women in a residential treatment setting. http://apha.confex.com/apha/130am/techprogram/paper_43771.htm.

- Fals-Stewart, W. & O'Farrell, T.J. (2003). Behavioral family counseling and naltrexone for male opioid-dependent patients. Journal of Consulting and Clinical Psychology. 71(3), 432.
- Fink, A. & Kosecoff, J. (1985). How to conduct surveys: A step by step guide. Beverly Hills: Sage Publications.
- Flynn, P.M., Kristiansen, P.L., Porto, J.V., & Hubbard, R.L. (1999). Costs and benefits of treatment for cocaine addiction in DATOS. Drug and Alcohol Dependence. 57, 167-174.
- Flynn, P.M., Porto, J.V., Rounds-Bryant, J.L., & Kristiansen, P.L. (2003). Costs and benefits of methadone treatment in DATOS – part 1: Discharged versus continuing patients. Journal of Maintenance in the Addictions. 2(1/2), 129-150.
- Forrester, D. & Jantzie, N. (2004). Learning theories. http://www.ucalgary.ca/~gnjantzi/learning_theories.htm.
- Fowler, F. (1984). Survey research methods. Beverly Hills: Sage Publications.
- Frame, M. & Williams, C.B. (1996). Counseling african americans: Integrating spirituality in therapy. Counseling and Values. 41(1). 16-28.
- French, M., Roebuck, M.C., & Alexandre, P.K. (2001). Illicit drug use, employment, and labor force participation. Southern Economic Journal 68(2), 349-369.
- French, M.T., Zarkin, G.A., & Dunlap, L.J. (1998). Illicit drug use, absenteeism, and earnings at six U.S. worksites. Contemporary Economic Policy 16 (3), 334-347.

- Ginexi, E.M. (2003). Transitions from treatment to work: Employment patterns following publicly funded substance abuse treatment. http://findarticles.com/p/articles/mi_qa3733/is_200304/ai_n9189473/print.
- Gorsch, R.L. (1995). Religious aspects of substance abuse and recovery. Journal of Social Issues. 51, 65-83.
- Grabowski, J., Stitzer, M.L., & Henningfield, J.E. (1984). (Eds.). Behavioral intervention techniques in drug abuse treatment. Washington, DC: U. S. Government Printing.
- Gravetter, F. & Wallnau, L. (1992). Statistics for the behavioral sciences: A first course for students of psychology and education. New York: West Publishing.
- Griffith, J.D., Rowan-Szal, G.A., Roark, R.R., & Simpson, D.D. (2000). Contingency management in outpatient methadone treatment: A meta-analysis. Drug and Alcohol Dependence. 58, 55-56.
- Harrison narcotics tax act. (1914). Addiction, pain, & public health website <http://doctordeluca.com>.
- Hansen, H. (2004). Faith-based treatment for addiction in Puerto Rico. JAMA. 291(23), 2882.
- Health & Medicine Week. (2003). One in four companies less likely to hire a recovering addict. NewsRx.com.
- Heinrich, C.J. (2002). Improving the organization, management, and outcomes of substance abuse treatment programs. American Journal of Drug and Alcohol Abuse. http://www.findarticles.com/p/articles/mi_m0978/is_4_28/ai_95765042/.

- Higgins, S.T., Budney, A.J., Bickel, W.K., et al. (1994). Incentives improve outcome in outpatient behavioral treatment for cocaine dependence. Archives of General Psychiatry. 51, 568-576.
- Higgins, S.T., Budney, A.J., Bickel, W.K., Hughes, J.R., Badger, G., et al. (1993). Achieving cocaine abstinence with a behavioral approach. American Journal of Psychiatry. 150(5), 763-769.
- Higgins, S.T., Delaney, D.D., Budney, A.J., Bickel, W.K., Hughes, J.R., et al. (1991). A behavioral approach to achieving initial cocaine abstinence. American Journal of Psychiatry. 148(9), 1218-1224.
- Higgins, S.T. & Petry, N.M. (1999). Contingency management: Incentives for sobriety. Alcohol Research and Health. 23(2), 122-127.
- Higgins, S.T. & Silverman, K. (Eds.). (1991). Motivating behavior change among illicit-drug abusers. (pp.345370). Washington, DC: American Psychological Association.
- Higgins, S.T., Wong, C.J., Badger, G.T., et al. (2000). Contingent reinforcement increases cocaine abstinence during outpatient treatment and 1-year of follow-up. Journal of Consulting and Clinical Psychology. 68, 64-72.
- House passes labor/HHS funding bill. (2002). Counselor The Magazine for Addiction Professionals. 3(2), 64.
- Hubbard, R.L., Craddock, S.G., & Anderson, J. (2003). Overview of 5-year followup in the drug abuse treatment outcome studies (DATOS). Journal of Substance Abuse Treatment. 25(3), 125-134.

- Iguchi, M.Y. (2000). What is SAMHSA doing to help communities make good decisions about the allocation of scarce treatment resources? Washington, D.C.: Rand.
- Illicit drug use down; varies by job. (1996). Public Health Reports. 111(5), 385-386.
- Integrate spirituality into substance abuse treatment for sustained abstinence. (1999). The Brown University Digest of Addiction Theory and Application. 18(1), 1-2.
- Jensen, E.L., Gerber, J., & Mosher, C. (2004). Social consequences of the war on drugs: The legacy of failed policy. Criminal Justice Policy Review, 15(1), 100-121.
- Kadden, R.M.(2002). Cognitive-behavior therapy for substance dependence: Coping skills training. <http://www.cognitivebehavior.com>.
- Kendall, S.R. (1998). Women and addiction in the United States: 1850-1920. In drug addiction research and the health of women. (Eds). Cora Lee Wetherington and Adele B. Roman. Rockville, MD: NIDA.
- Kentridge, R.W. (2004). Operant conditioning and behaviorism – a historical outline. <http://www.biozentrum.uni-wuerzburg.de/genetics/behavior/learning/behaviorism.html>.
- Kerr, D. (1998). Substance abuse among female offenders: Efforts to treat substance-abusing women offenders must address underlying reasons for use. Corrections Today. 60(7), 114-130.
- King, R. (1972). The drug hang up, america's fifty-year folly. <http://www.druglibrary.org/special/king/dhu>.

- Kinney, J. & Leaton, G. (1995). Loosening the grip a handbook of alcohol information (5th ed.). MO: Mosby-Year Book, Inc.
- Krueger, M.J.J. & Hanna, F.J. (1997). Why adoptees search: An existential treatment perspective. Journal of Counseling & Development. 75(3), 195-202.
- Laine, C., Hauck, W.W., Gourevitch, M.N., Rothman, J., et al. (2001). Regular outpatient medical and drug abuse care and subsequent hospitalization of persons who use illicit drugs. JAMA. 285(18), 2355-2362.
- Laws, D.R. (1999). Relapse prevention: The state of the art. Journal of Interpersonal Violence. 14(3), 285-302.
- Leshner, A.I. (2000). Addressing the medical consequences of drug abuse. NIDA, 15(4).
- Leshner, A.I. (1999). Science-based views of drug addiction and its treatment. JAMA. 282(14), 1314-1316.
- Lipton, D.S. (1998). Therapeutic communities: History, effectiveness and prospects. Corrections Today. 60(6), 106-109.
- Long, C.A., Langevin, C.M. & Weekes, J.R. (1998). A cognitive-behavioral approach to substance abuse treatment. Corrections Today. 60(6), 102-105.
- Mackinnon, S.V. (2004). Spirituality: Its role in substance abuse, treatment and recovery. The Brown University Digest of Addiction Theory and Application.
- Marlowe, D. B., Merikle, E. P., Kirby, K. C., Festinger, D. S., & McLellan, A. T. (2001). Multidimensional assessment of perceived treatment-entry pressures among substance abusers. Psychology of Addictive Behaviors. 15, 97-108.

Marwick, C. (1998). Illicit drug users not idle; report says 70% go to work. JAMA. 282(14), 1320-1321.

Mathias, R. (1996). Study finds ways to improve drug abuse treatment process. NIDA. 11(2), 65-66.

Medical News Today. (2004). Bush announces \$100 million in grants to support substance abuse treatment USA. <http://www.medicalnewstoday.com>.

Morgan, B. & MacMillan, P. (1999). Helping clients move toward constructive change: A three-phase integrated counseling model. Journal of Counseling and Development. 77(2), 153-159.

Morgenstern, J. & Blanchard, K.A. (2006). Welfare reform and substance abuse treatment for welfare recipients. Alcohol Research and Health. 29(1). 63-67.

Mueller, M.D. & Wyman, J.R. (1997). Study sheds new light on the state of drug abuse treatment nationwide. NIDA. 12(5).

Musto, D.F. (1972). The 1937 marijuana tax act. Archives of General Psychiatry. 26, 101-108.

National Association for Children of Alcoholics and the Johnson Institute. (2003). Core competencies for clergy and other pastoral ministers in addressing alcohol and drug dependence and the impact on family members. Substance abuse and the family: Defining the role of faith community. www.samhsa.gov.

- National Association of Cognitive-Behavioral Therapists. (1996). Helping difficult & challenging clients. <http://www.nacbt.org/whatiscbt.htm>.
- National Association of Cognitive-Behavioral Therapists. (2004). History of cognitive-behavioral therapy. <http://www.nacbt.org/historyofcbt.htm>.
- National Conference of State Legislatures. (2003). Substance abuse and TANF. ISBN: 1-58024-282-0.
- National Drug Intelligence Center. (2005). National drug threat assessment 2005. <http://www.usdoj.gov/ndic/pubs11/12620/exec-sum.htm>.
- National Institute on Drug Abuse. (2005). Congressional and legislative activities. <http://www.nida.nih.gov/about/legislation/Chronology.html>.
- National Institute on Drug Abuse. (2005). Drug counseling for cocaine addiction. <http://www.drugabuse.gov/TXManuals/DCCA/DCCA10.html>.
- National Institute on Drug Abuse. (2005). NIDA Infofacts, drug addiction treatment methods. <http://www.nida.gov/infofacts/treatmeth.html>.
- National Institute on Drug Abuse. (2006). NIDA drugs of abuse and related topics: Principles of drug abuse treatment. http://www.nida.nih.gov/PODAT_CJ/faqs/faqs2.html.
- National Women's Health Information Center. (1999). Drug abuse treatment. http://www.thebody.com/nwhic/drug_abuse.html.
- NIDA Infofacts: Drug addiction treatment methods (2005). <http://www.drugabuse.gov/infofacts/treatmeth.html>.

- Nunes-Dinis, M. (1993). Drug and alcohol misuse: Treatment outcomes and services for women. In Families living with drugs and HIV. Intervention and treatment. edited by R.P. Barth, P. Pietrzak & M. Ramler. 144-176. New York: Guilford.
- Office of National Drug Control Policy. (2005). The president's national drug control strategy. <http://www.whitehousedrugpolicy.gov/publications/policy>.
- Patkar, A.A., Thornton, C.C., Mannelli, P., et al. (2004). Comparison of pretreatment characteristics and treatment outcomes for alcohol, cocaine and multisubstance-dependent patients. Journal of Addictive Diseases. 23, 93-109.
- Patients consider spirituality and self-help approaches vital in TCS. (2004). The Brown University Digest of Addiction Theory and Application. 23(7), 1,7.
- Peteet, J.R. (1993). A closer look at the rate of a spiritual approach in addictions treatment. Journal of Substance Abuse Treatment. 10(3), 263-267.
- Petry, N.A. (2002). A clinician's guide for implementing contingency management programs. A guideline developed for the behavioral health recovery management project. Illinois Department of Human Services' Office of Alcoholism and Substance Abuse.
- Petry, N.M. (2000). A comprehensive guide for the application of contingency management procedures in standard clinic settings. Drug and Alcohol Dependence. 58, 9-25.
- Petry, N.M. (2002). Contingency management in addiction treatment. <http://www.psychiatrictimes.com/p020252.html>.

- Petry, N.M., Petrakis, I., Trevisan, L., Wiredu, G., et al. (2001). Contingency management intervention: From research to practice. The American Journal of Psychiatry. 158(5), 694-702.
- Pickens, R.W., Leukefeld, C.G. & Schuster, C.R. (1991). (Eds.) Improving drug abuse treatment. Washington, DC: U.S. Government Printing Office.
- Pine, F. (1992). The interpretive movement. In N.G. Hamilton (Ed.). From inner sources. New directions in object relations psychotherapy. (p.53-73). Northvale, NJ: Aronson.
- Plante, T.G. (2000). Religious faith and spirituality may help people recovery from substance abuse. <http://www.apa.org/release/faith.html>.
- President release fy 2007 budget. (2006). NCADD Washington Report. 9(2), 1-1.
- Psychology Information Online. (2004). Assertiveness Training. <http://www.psychologyinfo.com/treatment/assertiveness.html>.
- Psychology Matters. (2006). Accentuate the positive: Vouchers help drug abusers stay in treatment. <http://www.psychologymatters.org/higgins.html>.
- Raines, K., Pronti, M., & Taylor, D. (1996). Cognitive approach. <http://facultyweb.cortland.edu/~ANDERSMD/COG/COG.HTML>.
- Rhodes, G.L., Saules, K.K., Helmus, T.C., Roll, J., et al. (2003). Improving on-time counseling attendance in a methadone treatment program: A contingency management approach. (4), 759.

- Richard, A.J., Bell, D.C., & Carlson, J.W. (2000). Individual religiosity, moral community, and drug user treatment. Journal for the Scientific Study of Religion. 39(2), 240-246.
- Rounsaville, B.J. & Carroll, K.M. (1992). Individual psychotherapy for drug abusers. In Lowinsohn, J.H., Ruiz, P. and Millman, R.B. (Eds). Comprehensive textbook of substance abuse. (2nd ed.). New York: Williams and Wilkins.
- Rutledge, K. (2004). Behaviorism. http://teachnet.edb.utexas.edu/~lynda_abbott/Behaviorism.html.
- SAMHSA grants awarded to expand treatment options. (2004). Psychiatric Times. 54-55.
- Satre Online. (2002). Patterns and inevitability bad faith. http://www.geocities.com/_sartresite/articles_ethics_3.html.
- Serovich, J.M. (2001). The role of family and friend social support in reducing emotional distress among HIV-positive women. AIDS Care. 13(3), 335-342.
- Shine, B. (2000). Some cocaine abusers fare better with cognitive behavioral therapy, others with 12-step programs. NIDA. 15(1), 25-26.
- Silverman, K., et al. (1994). Differential reinforcement of sustained cocaine abstinence in intravenous polydrug abusers In L. S. Harris (ed) Problems of Drug Dependence 1994: Proceedings of the 56th Annual Scientific Meeting, The College on Problems of Drug Dependence Rockville, MD: NIDA.

- Silverman, K., Higgins, S.T., Brooner, R.K., Montoyo, I.D., Cone, E.J., Schuster, C.R., & Preston, K.L. (1996). Sustained cocaine abstinence in methadone maintenance patients through voucher-based reinforcement therapy. Arch General Psychiatry, 53, 40-415.
- Skinner, B. F. (1968). The technology of teaching. Meredith Corporation: New York.
- Smith, M.J.W., Whitaker, T., & Weismiller, T. (2006). Social workers in the substance abuse treatment field: A snapshot of service activities. Health and Social Work, 31(2).
- Solomon, P. (2000). Intervention for families of individuals with schizophrenia maximizing outcomes for their relatives. PA: University of Pennsylvania, School of Social Work.
- Spear, Jane. (2001). Existential psychology. http://www.findarticles.com/cf_dls/g2699/0001/2699000125/print.jhtml.
- Stanton, M.D., Todd, T.C., Heard, D.B., Kirschner, S., Kleiman, J.I., Mowatt, D.T., Riley, P., Scott, S.M., & VanDeusen, J.M. (1992). Heroin addiction as a family phenomenon: A new conceptual model. American Journal of Alcohol Abuse, 5, 125-150.
- Stitzer, M.L., Iguchi, M.Y., & Felch, L.J. (1992). Contingent take-home incentive. Journal of Consulting Clinical Psychology, 60, 927-934.
- Stocker, S. (1998). Men and women in drug abuse treatment relapse at different rates and for different reasons. NIDA 13 (4), 59-60.

Strain, E.C. & Stoller, K.B. (1999). Introduction and historical overview. In Methadone treatment for opioid dependence. (Eds). Eric C. Strain & Maxine L. Stitzer. Baltimore: The John Hopkins University Press.

Stoller, K.B. & Bigelow, G.E. (1999). Regulatory, cost, and policy issues. In Methadone treatment for opioid dependence. (Eds). Eric C. Strain & Maxine L. Stitzer Baltimore: The John Hopkins University Press.

Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment. (1998). Substance abuse treatment and welfare reform. DHHS Publication No. (SMA)98-3226. Washington, D.C.: U.S. Government Printing Office.

Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment. (2004). SAMHSA announces funding opportunities. http://alt.samhsa.gov/samhsa_news/volume_XII_3/article.

Substance Abuse and Mental Health Services Administration. (2001). \$4 Million available to support substance abuse recovery community organizations <http://www.samhsa.gov/news/newsreleases>.

Substance Abuse and Mental Health Services Administration. (2000). National Household Survey on Drug Abuse. Main findings 1998. (DHHS Publication No. SMA 00-3381). Rockville, MD: Author.

Substance Abuse and Mental Health Services Administration. (2004). Recovery community services programs. <http://rcsp.samhsa.gov/about/overview.htm>.

Substance Abuse and Mental Health Services Administration Office of Applied Studies.

(2005). Treatment episode data set (TEDS) highlights – 2003 national admissions to substance abuse treatment services. <http://www.oas.samhsa.gov>.

Substance Abuse and Mental Health Services Administration. (2001). \$2.5 Million available to strengthen substance abuse treatment in minority communities.

<http://www.samhsa.gov/news/newsreleases>.

Substance Abuse and Mental Health Services Administration. (2004). SAMHSA FY 2005 grant funding opportunity.

http://www.samhsa.gov/grants/2005/nofa/ti05003_TCE.aspx.

Substance Abuse and Mental Health Services Administration. (2001). The impact of substance abuse treatment on employment outcomes among AFDC clients in Washington State. <http://csat.samhsa.gov/tap25/intro.html>.

Swan, N. (1998). Drug abuse cost to society set at \$97.7 billion, continuing steady increase since 1975. NIDA 13(4), 33-35.

The National Treatment Improvement Evaluation Study. (1997).

<http://www.ncjrs.org/nties97/nties97f.htm>.

United Nations International Drug Control Programme Vienna. (2002). Contemporary drug abuse treatment, A review of the evidence base.

http://www.unodc.org/odccp/treatment_toolkit.html.

United Nations International Drug Control Programme Vienna. (2003). Investing in drug abuse treatment, A discussion paper for policy makers.

http://www.unodc.org/odccp/treatment_toolkit.html.

- United Nations Office of Drugs and Crime. (2004). Substance abuse treatment and care for women. http://www.unodc.org/pdf/report_2004-08-30/_summary.pdf.
- U.S. Department of Health and Human Services. (2004). Effective prevention partners: Community- and faith-based programs. DHHS Publication No. SLF100. Washington, D.C.: U.S. Government Printing Office.
- U.S. Department of Health and Human Services. (2000). Integrating substance abuse treatment and vocational services. DHHS Publication No. (SMA) 02-3746. Washington, D.C.: U.S. Government Printing Office.
- U.S. Department of Health and Human Services. (2005). Medication-assisted treatment for opioid addicted in opioid treatment programs. Treatment Improvement Protocol (TIP) Series 43. DHHS Publication No. (SMA) 05-4048. Washington, D.C.: U.S. Government Printing Office.
- U.S. Department of Health and Human Services. (2004). 2003 National survey on drug use & health: Results. <http://oas.samhsa.gov>.
- U.S. Department of Health and Human Services. (2004). Services research outcome study (SROS). <http://www.oas.samhsa.gov/Sros/httoc.htm>.
- U.S. Department of Health and Human Services. (2001). Substance abuse prevention and treatment, recovery, mental health services and spirituality: Partnerships that work. <http://www.samhsa.gov/news/newsrelease/ACF4F06.htm>.

- U.S. Department of Health and Human Services. (2004). Substance abuse treatment and family therapy. Treatment Improvement Protocol (TIP) Series 39. DHHS Publication No (SMA) 04-3957. Washington, D.C: U.S. Government Printing Office.
- U.S. Department of Health and Human Services. (2001). Summary of findings from the 2000 national household survey on drug abuse. <http://www.samhsa.gov/oas/NHSDA/2kNHSDA/chapter2.htm>.
- U.S. Department of Health and Human Services Office of the Assistant Secretary for Planning and Evaluation. (1997). Alcohol and other drug treatment for parents and welfare recipients: Outcomes, cost, and benefits. <http://aspe.hhs.gov/HSP/caldrug/calfin97.htm>.
- U.S. Department of Labor Employment & Training Administration. (2004). Substance abuse and employment challenges. <http://www.doleta.gov/wwt/resources/fact-drugfree.cfm>.
- Vandenberg, B. (1991). Is epistemology enough? An existential consideration of development. American Psychologist. 46, 1278-1286.
- Ward, K. (2000). Christianity a short introduction. Oxford: Oneworld.
- Washington, O.G.M. & Moxley, D.P. (2001). The use of prayer in group work with African American women recovering from chemical dependency. Families in Society. 82(1), 49-59.
- Williams, M.L. (2004). Drug treatment: The Willard option. Corrections Today. 66(2), 106-109.

Woolis, D.D., Cyphers, G., & Roth, D. (2000). Recovery: An act of work.

Policy and Practice of Public Human Services. 58(2), 33-40.

Yalom, I. (1980). Existential psychotherapy. New York: Basic Books.

Zuber, A. (1997). Restaurant workers worst drug abusers. Nation's Restaurant News.

31(7), 1-2.